

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Seres Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

27-4326290
(I.R.S. Employer
Identification No.)

215 First Street
Cambridge, MA 02142
(617) 945-9626

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾	Amount of Registration Fee ⁽²⁾
Common Stock, \$0.001 par value per share	\$100,000,000	\$11,620

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the offering price of additional shares that the underwriters have the option to purchase.
- (2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION DATED May 27, 2015
PRELIMINARY PROSPECTUS



Shares

Seres Therapeutics, Inc.
Common Stock

This is the initial public offering of shares of common stock of Seres Therapeutics, Inc. All of the _____ shares of common stock are being sold by us.

Prior to this offering, there has been no public market for the common stock. It is currently estimated that the initial public offering price per share will be between \$ _____ and \$ _____. Application has been made for the quotation of the common stock on The NASDAQ Global Market under the symbol "MCRB."

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012, and, as such, have elected to take advantage of certain reduced reporting requirements in this prospectus and may elect to comply with certain reduced public company reporting requirements in future filings.

Investing in our common stock involves risks. See "[Risk Factors](#)" beginning on page 12 to read about factors you should consider before buying shares of the common stock.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial public offering price	\$ _____	\$ _____
Underwriting discount ⁽¹⁾	\$ _____	\$ _____
Proceeds, before expenses, to Seres Therapeutics	\$ _____	\$ _____

(1) See "Underwriting" beginning on page 159 for additional information regarding underwriting compensation.

To the extent that the underwriters sell more than _____ shares of common stock, the underwriters have the option to purchase up to an additional _____ shares from Seres Therapeutics, Inc. at the initial public offering price less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on _____, 2015.

Goldman, Sachs & Co.

BofA Merrill Lynch

Leerink Partners

Canaccord Genuity

Prospectus dated _____, 2015

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Through and including _____, 2015 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

We have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

Neither we nor any of the underwriters have taken any action that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who have come into possession of this prospectus in a jurisdiction outside the United States are required to inform themselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the "Risk Factors" section beginning on page 12 and our financial statements and the related notes appearing at the end of this prospectus, before making an investment decision.

As used in this prospectus, unless the context otherwise requires, references to "we," "us," "our" and "Seres Therapeutics" refer to Seres Therapeutics, Inc. and Seres Therapeutics Securities Corporation, collectively.

Overview

We are a microbiome therapeutics platform company developing a novel class of biological drugs, which we refer to as Ecobiotic microbiome therapeutics. The human microbiome is an ecology of microorganisms, including bacteria, fungi and viruses, that, when unhealthy, or dysbiotic, can leave the body more susceptible to infections, metabolic disorders, allergies, autoimmune disease, inflammation and other conditions. Our drugs are designed to restore health by repairing the function of a dysbiotic microbiome. We are initially focused on implementing our microbiome therapeutics platform to develop Ecobiotic microbiome therapeutics that treat dysbiosis in the colonic microbiome, one of the most diverse microbiomes in the human body. SER-109, our lead product candidate, is designed to prevent further recurrences of *Clostridium difficile* infection, or CDI, a debilitating infection of the colon and, if approved by the U.S. Food and Drug Administration, or FDA, could be a first-in-field drug. In our Phase 1b/2 clinical study of SER-109 in recurrent CDI patients, 97% of patients achieved a clinical cure, which we defined as the absence of CDI requiring antibiotic treatment during the eight-week period after SER-109 dosing. Based on these data and discussions with the FDA, we initiated a Phase 2 clinical study of SER-109 for recurrent CDI and dosed the first patient in May 2015. We expect study results in the middle of 2016.

The human microbiome is one of the richest and most diverse ecosystems on earth, with a population of more than 100 trillion microorganisms that live in our intestines, mouth, skin and elsewhere in the body. Among the various microbiomes in the human body, the colonic microbiome is one of the most diverse microbial communities. In a healthy, symbiotic state the colonic microbiome plays an important role in human health, helping the body digest food, resist pathogens, regulate the metabolic system and synthesize essential nutrients and vitamins. However, the colonic microbiome may change in composition for a variety of reasons, including in response to long-term or high-dose antibiotics and following gastrointestinal infection. These changes in composition result in the loss of key microbes, resulting in a state of dysbiosis. Dysbiosis of the colonic microbiome is associated with a wide range of disease and infections, such as gastrointestinal infection and inflammatory and metabolic diseases.

While the study of the human microbiome is not new, the scientific community's understanding of the microbiome, and the colonic microbiome in particular, has been significantly advanced through genomics, which has enabled the broader understanding of the human microbiome at the organismal, functional and community level. Recently published scientific research has correlated dysbiosis in the colonic microbiome with numerous diseases and conditions in humans and in animal models, including infections, metabolic disorders, allergies, autoimmune disease, inflammation and other non-specific conditions, such as irritable bowel syndrome, or IBS. Information regarding the impact of the colonic microbiome on various disease states is still emerging, although an increasing number of publications are appearing in leading scientific journals. There are currently no FDA-approved therapeutics that are designed to restore the microbiome to a healthy state.

We are developing a new approach to treating disease by restoring a dysbiotic colonic microbiome to a healthy state using our Ecobiotic microbiome therapeutics. Our approach is premised on the hypothesis that the proximal cause of many diseases is a dysbiosis in the natural state of the colonic microbiome that perpetuates the conditions that allow disease to take hold and flourish. We believe that the restoration of a dysbiotic colonic microbiome using rationally designed therapeutics represents a paradigm shift in the approach to treating the underlying disease. Our Ecobiotic microbiome therapeutics are rationally defined ecological compositions, consisting of discrete combinations of beneficial microorganisms with targeted functional properties that provide the ability to re-establish keystone features of a functional microbiome in settings of disease.

Our approach to discovery and design is based on an iterative bedside-to-bench-to-bedside drug discovery strategy that begins with data on the human microbiome that we gather from clinical studies. From this data, we identify the ecological differences between a healthy and a diseased microbiome, which we then use to rationally design potential Ecobiotic microbiome therapeutics. After further in-lab testing, selected Ecobiotic microbiome therapeutic candidates are moved back into the clinic for testing with humans. We then apply a comparative genomic systems biology framework that leverages proprietary computation, microbiology and screening capabilities to design lead candidates targeted at these ecological deficiencies. We are able to apply this framework and experience to existing clinical data sets, as well as to the proprietary clinical data we have generated through our SER-109 clinical trial. We believe we can utilize our knowledge and data to design Ecobiotic microbiome therapeutics to treat various medical conditions, such as non-*Clostridium difficile* infection and inflammatory and metabolic diseases. We also have advanced capabilities in the fermentation of colonic bacteria and the formulation of vegetative and spore forms of bacteria into therapeutics. We believe that the combination of experience, proprietary data and proprietary know-how that comprise our microbiome therapeutics platform provides us with a competitive advantage in the design and development of microbiome therapeutics. Further, our approach and platform, which enables the rational design, testing, optimization, formulation and manufacturing of Ecobiotic microbiome therapeutics, provide a framework that we believe can significantly reduce the time typically required to advance therapeutics to the clinic.

***Clostridium difficile* Infection, or CDI**

Clostridium difficile, or *C. difficile*, is a Gram-positive, toxin-producing, spore-forming bacterium that generally causes severe and persistent diarrhea in infected individuals, but can also lead to more severe outcomes, including in the most serious cases, death. CDI is most often associated with the prior use of antibiotics, which we believe decreases resistance to CDI by causing dysbiosis in the microbiome. Since *C. difficile* spores are able to survive for long periods of time outside of the body, and because healthcare settings are often sites of significant antibiotic use, CDI transmission rates in hospitals, long-term acute care facilities and nursing homes have been increasing. CDI is also a cause of morbidity and mortality among hospitalized cancer patients and bone marrow transplant patients, as their immune systems are suppressed by cytotoxic drugs, which are drugs that inhibit or prevent the function of cells, and they may be heavily treated with antibiotics for infections. More recently, the rise of community-acquired CDI has been recognized as a growing problem.

The U.S. Centers for Disease Control has identified CDI as one of the top three most urgent antibiotic-resistant bacterial threats in the United States. It is the most common cause of hospital acquired infection in the United States and has overtaken methicillin-resistant *Staphylococcus aureus* in prevalence. CDI is responsible for the death of approximately 29,000 Americans each year. CDI is also very costly to the healthcare system. According to a summary of studies published in 2009 in *The Journal of Hospital Infection*, the treatment cost per episode of primary CDI was as much as \$5,000 and as much as \$18,000 per recurrence of CDI. We estimate the incidence of primary CDI in the United States is between 640,000 and 820,000 patients per year. While the epidemiological data are

varied outside the United States, we believe that, due to the widespread use of antibiotics, CDI is a growing global disease. Research suggests that the risk of recurrence is approximately 25% after the primary occurrence of CDI, 40% after a first recurrence and greater than 60% for those experiencing two or more recurrences. In addition, a recent randomized trial comparing two antibiotics for the treatment of primary CDI indicated that 8% of patients receiving fidaxomicin and 9% of patients receiving vancomycin did not respond to these antibiotics two days after completing their antibiotic regimen. We estimate that the addressable population of patients in the United States with recurrent CDI, defined as patients who have experienced at least three occurrences of CDI in the past nine months, is between 85,000 and 110,000 patients per year.

The current standard of care, and only FDA-approved option, for CDI is to treat with antibiotics. In many cases, antibiotic treatments may resolve the acute infection caused by *C. difficile*. However, these antibiotic treatments kill bacteria indiscriminately, inducing a dysbiosis of the microbiome and potentially making patients more susceptible to a recurrence of CDI. For those patients who experience a recurrence of CDI, we believe it is this dysbiosis of the microbiome, not the presence of *C. difficile*, which is the proximal cause of disease. Other treatment alternatives for patients with CDI include fecal microbiota transplantation, or FMT, and over-the-counter probiotics. FMT, also known as a stool transplantation, is a procedure during which donated stool, including fecal microbes, is typically instilled via colonoscopy into a patient with CDI. While FMT has demonstrated efficacy, it presents several challenges, including the potential to transmit infectious or allergenic agents between hosts, the invasive nature of administration and the difficulty performing FMT on a mass scale. FMT is not approved by the FDA and we believe it may be unable to gain such approval since the product, to our knowledge, cannot be standardized and characterized according to current regulatory requirements for identity, potency, purity and safety.

Probiotics represent a group of products typically available over the counter in supplements and in some foods, which contain a small number of species of bacteria. However, to date there have been no clinical studies that have established the ability of probiotics to repair a dysbiosis of the microbiome. Further, there is neither a legally recognized definition of, nor a standard of identity for, the term probiotic in the United States or Europe.

We believe that the ability to develop drugs that are able to modulate the microbiome and return a dysbiotic microbiome to its healthy state presents a significant opportunity to improve human health.

Our Product Candidates

Our CDI Franchise

SER-109 is a bacterial spore ecology consisting of an average of 50 bacterial species derived from healthy donors' fecal matter that is designed to prevent further recurrences of CDI in patients suffering from recurrent CDI by restoring the dysbiotic microbiome to a state of health. In our recently completed open label Phase 1b/2 clinical study, 29 of 30 patients, or 97% of patients, achieved a clinical cure, which we defined as the absence of CDI requiring antibiotic treatment during the eight-week period after SER-109 dosing. Additionally, 26 of 30 patients, or 87% of patients, achieved the primary efficacy endpoint of experiencing no recurrence of CDI associated diarrhea during the eight weeks post-treatment. The study demonstrated a favorable safety profile with no serious adverse events considered by the investigators to be attributable to SER-109 treatment. We also performed an analysis of the microbiome using sequencing technology and microbiological analysis to demonstrate a re-establishment of keystone organisms and a rapid increase in bacterial diversity, which enable the restoration of the microbiome to a healthy state. Based on these results, we initiated a Phase 2 clinical study of SER-109 for recurrent CDI and dosed the first patient in May 2015. We expect study results in the middle of 2016. We plan to conduct manufacturing process pre-validation studies of SER-109 in the second half of 2015 to support a Phase 3 clinical trial and a potential biologics license application and commercial launch.

We believe the results of our open label Phase 1b/2 clinical study of SER-109 provide validation of the hypothesis underlying our microbiome therapeutics platform, supporting its further use to develop additional Ecobiotic microbiome therapeutics. Using the data we obtained from the SER-109 clinical trial, we are developing SER-262 as an Ecobiotic microbiome therapeutic designed to be used following antibiotic treatment of primary CDI to prevent the initial recurrence of CDI. SER-262 consists of bacteria that are a subset of the bacterial ecology comprising SER-109. Unlike SER-109, SER-262 strains are clonally isolated and produced in fermenters and do not require donations from human sources. Pre-clinical studies of SER-262 have demonstrated efficacy in preventing the recurrence of CDI in mouse and hamster models. We intend to initiate clinical studies of SER-262 in the middle of 2016.

If approved, we believe these two product candidates will enable us to provide a more effective and safer treatment for preventing the recurrence of CDI than the current standard of care.

Our Other Product Candidates

We believe our Ecobiotic microbiome therapeutics represent a novel approach with potential application across a broad range of human diseases. Our most advanced drug development programs are focused on the area of gastrointestinal infections, where the causal link between dysbiosis of the microbiome and susceptibility to disease has been established. In addition to our CDI product candidates, SER-109 and SER-262, we are utilizing our microbiome therapeutics platform to develop SER-287 to treat inflammatory bowel disease, including ulcerative colitis, and SER-155 to treat enteric pathogens, such as antibiotic-resistant bacteria. We are also researching Ecobiotic microbiome therapeutics for the treatment of metabolic diseases, such as early-stage, non-insulin dependent diabetes; other inflammatory diseases, such as Crohn's disease; and infections related to antibiotic use, cancer chemotherapy and immune suppression.

The following chart summarizes our current product pipeline:

Program	Discovery	Pre-Clinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
SER-109 Recurrent CDI						Results of Phase 2 clinical study in the middle of 2016
SER-262 Primary CDI ⁽¹⁾						Initiate clinical studies in the middle of 2016
SER-287 Ulcerative colitis						Initiate Phase 1 study by the end of 2015
SER-155 Antibiotic-resistant bacteria & post-antibiotic restoration						Continue pre-clinical screening efforts to identify indication

(1) We are developing SER-262 to be used following antibiotic treatment of primary CDI to prevent initial recurrence of CDI.

Our Management Team and Investors

We have assembled a world class group of scientists, clinicians, directors and investors who have established our leadership in the field of microbiome therapeutics. We were co-founded by Drs. Noubar Afeyan, David Berry and Geoffrey von Maltzahn of Flagship VentureLabs, the innovation foundry of Flagship Ventures, which has founded 27 life sciences companies. Through Flagship VentureLabs' contribution of foundational scientific concepts and intellectual property, assembly of our management team and critical early-stage support, we launched as a company focused on the ecological nature of the microbiome. Led by Dr. Roger Pomerantz, our Chairman, President and Chief Executive Officer, our experienced management team possesses core capabilities in microbiome therapeutics, infectious disease, drug development, commercialization, chemistry, manufacturing and controls, public company management and finance. Dr. Pomerantz, an infectious disease physician-scientist, has extensive experience in infectious disease drug development and commercialization, licensing and acquisitions gained over a 10-year career in senior executive positions at Merck & Co, Johnson & Johnson and Tibotec Pharmaceuticals. Dr. Pomerantz led the development and commercialization of eight FDA-approved infectious disease drugs in his career. In addition to Dr. Pomerantz, our management team includes Mr. Eric Shaff, Dr. David Cook, Dr. John Aunins, Dr. Michele Trucksis and Dr. Matthew Henn. Collectively, our management team has successfully developed 18 approved pharmaceutical drugs in infectious disease and other indications. Our management team has extensive experience in microbial ecology, microbiology and live biologicals, with a collective 23 years studying the microbiome and over 60 published papers on the science of the microbiome. Additionally, our team has extensive experience in building out commercial capabilities in specialty diseases and has a track record for success in launching vaccine products, which have analogous manufacturing processes to that of Ecobiotic microbiome

therapeutics. In November and December 2014, we completed two preferred stock financings, which included as investors several prominent mutual funds and healthcare dedicated funds, as well as a multinational health sciences company.

Our Strategy

Our goal is to become the leading biopharmaceutical company developing and commercializing microbiome therapeutics to address significant unmet medical needs. The critical components of our strategy include:

- rapidly advancing the development of our lead product candidate, SER-109, for the prevention of further recurrence of CDI in patients with recurrent CDI;
- advancing the clinical development of SER-262 to be used following antibiotic treatment of primary CDI to prevent an initial recurrence of CDI;
- advancing the clinical development of SER-287 for the treatment of inflammatory bowel disease, including ulcerative colitis, and developing SER-155 for the treatment of antibiotic-resistant bacteria;
- leveraging our leading microbiome therapeutics platform to develop additional innovative and novel Ecobiotic microbiome therapeutics across a range of medical conditions with high unmet need;
- commercializing our Ecobiotic microbiome therapeutics, including SER-109, directly in the United States and with collaborators outside the United States; and
- developing manufacturing capabilities sufficient to support commercialization of any approved Ecobiotic microbiome therapeutic candidates.

Risks Associated with Our Business

Our business is subject to numerous risks and uncertainties, including those highlighted in the section titled “Risk Factors” immediately following this prospectus summary. Some of these risks are:

- we have a limited operating history, have incurred significant losses since our inception, expect to incur losses for the foreseeable future and may never achieve or maintain profitability;
- we will need additional funding before we can expect to become profitable from the sales of our products, if approved, and if we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts;
- we are very early in our development efforts and our product candidates, including SER-109, may not be successful in later stage clinical trials and, as a result, may never be approved as marketable therapeutics;
- we rely, and expect to continue to rely, on third parties to conduct our clinical trials and to manufacture our product candidates for pre-clinical and clinical testing, and those third parties may not perform satisfactorily, which could delay our product development activities;
- if we are unable to adequately protect our proprietary technology, or obtain and maintain issued patents which are sufficient to protect our product candidates, others could compete against us more directly, which would have a material adverse impact on our business, results of operations, financial condition and prospects; and
- we may not be able to retain key executives or to attract, retain and motivate qualified personnel.

Our Corporate Information

We were incorporated in the State of Delaware in 2010 under the name Newco LS21, Inc. In October 2011, we changed our name to Seres Health, Inc., and in May 2015, we changed our name to Seres Therapeutics, Inc. Our principal executive offices are located at 215 First Street, Cambridge, Massachusetts 02142 and our telephone number is (617) 945-9626. Our website address is www.serestherapeutics.com. The information contained in, or accessible through, our website does not constitute a part of this prospectus.

Implications of Being an Emerging Growth Company

As a company with less than \$1.0 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012, or JOBS Act, enacted in April 2012. An “emerging growth company” may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to present only two years of audited financial statements and only two years of related Management’s Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions until the last day of our fiscal year following the fifth anniversary of the closing of this offering. However, if certain events occur prior to the end of such five-year period, including if we become a “large accelerated filer,” our annual gross revenue exceeds \$1.0 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

THE OFFERING

Common stock offered by us	shares
Common stock to be outstanding after this offering	shares (or additional shares in full) shares if the underwriters exercise their option to purchase additional shares in full)
Option to purchase additional shares	The underwriters have a 30-day option to purchase up to additional shares of our common stock.
Use of proceeds	We intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, (1) to advance the clinical development of SER-109, (2) to advance the development of our other product candidates, SER-262, SER-287 and SER-155, and (3) the remainder, if any, to fund our current and future research and development activities and for working capital and other general corporate purposes. See "Use of Proceeds" beginning on page 55.
Risk factors	See "Risk Factors" beginning on page 12 and the other information included in this prospectus for a discussion of factors you should consider carefully before deciding to invest in our common stock.
Proposed NASDAQ Global Market symbol	"MCRB"

The number of shares of our common stock to be outstanding after this offering is based on 7,536,515 shares of our common stock outstanding as of May 13, 2015 and excludes:

- 4,014,246 shares of common stock issuable upon exercise of stock options outstanding as of May 13, 2015, at a weighted average exercise price of \$3.63 per share;
- 75,000 shares of common stock available for future issuance under our 2012 Stock Incentive Plan as of May 13, 2015;
- 92,127 shares of common stock issuable upon the exercise of a warrant to purchase Series A-2 preferred stock that will become a warrant to purchase common stock, at an exercise price of \$1.78 per share, in connection with this offering;
- shares of common stock issuable upon the exercise of stock options to be granted in connection with this offering under our 2015 Incentive Award Plan, or the 2015 Incentive Plan, which will become effective in connection with this offering, to some of our directors, executive officers and employees, at an exercise price per share equal to the public offering price in this offering;
- additional shares of our common stock that will become available for future issuance under our 2015 Incentive Plan as well as shares of our common stock that become available pursuant to provisions in our 2015 Incentive Plan that automatically increase the share reserve under our 2015 Incentive Plan as described in "Executive and Director Compensation—Incentive Plans—2015 Incentive Award Plan"; and
- additional shares of our common stock that will become available for future issuance under our 2015 Employee Stock Purchase Plan, or the 2015 ESPP, which will become effective in connection with this offering, as well as shares of our common stock that become available pursuant to provisions in our 2015 ESPP that automatically increase the share reserve under our 2015 ESPP as described in "Executive and Director Compensation—Incentive Plans—2015 Employee Stock Purchase Plan."

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Unless otherwise indicated, this prospectus reflects and assumes the following:

- the automatic conversion of all shares of our preferred stock outstanding as of May 13, 2015 into an aggregate of 22,866,987 shares of our common stock in connection with this offering;
- the outstanding warrant to purchase our Series A-2 preferred stock becoming a warrant to purchase our common stock in connection with this offering;
- no exercise of outstanding options or warrants after May 13, 2015;
- the filing of our restated certificate of incorporation and the adoption of our amended and restated bylaws, which will occur upon the closing of this offering; and
- no exercise by the underwriters of their option to purchase additional shares of our common stock.

SUMMARY CONSOLIDATED FINANCIAL DATA

You should read the following summary consolidated financial data together with our consolidated financial statements and the related notes appearing at the end of this prospectus and the "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus. We have derived the consolidated statement of operations data for the years ended December 31, 2012, 2013 and 2014 from our audited consolidated financial statements appearing at the end of this prospectus. The consolidated statement of operations data for the three months ended March 31, 2014 and 2015 and the consolidated balance sheet data as of March 31, 2015 have been derived from our unaudited consolidated financial statements appearing at the end of this prospectus and have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information in those statements. Our historical results are not necessarily indicative of the results that should be expected in the future, and results for the three months ended March 31, 2015 are not necessarily indicative of the results to be expected for the full year ending December 31, 2015.

	Year Ended December 31,			Three Months Ended March 31,	
	2012	2013	2014	2014	2015
(in thousands, except per share data)					
Consolidated Statement of Operations Data:					
Revenue	\$ —	\$ —	\$ —	\$ —	\$ —
Operating expenses:					
Research and development	2,077	4,805	10,718	1,032	5,561
General and administrative	956	1,247	4,364	640	2,606
Total operating expenses	3,033	6,052	15,082	1,672	8,167
Loss from operations	(3,033)	(6,052)	(15,082)	(1,672)	(8,167)
Other income (expense):					
Interest income (expense), net	(93)	(42)	(209)	(37)	(17)
Revaluation of preferred stock warrant liability	—	(8)	(1,418)	20	213
Total other income (expense), net	(93)	(50)	(1,627)	(17)	196
Net loss	(3,126)	(6,102)	(16,709)	(1,689)	(7,971)
Accretion of convertible preferred stock to redemption value	(276)	(875)	(1,291)	(233)	—
Net loss attributable to common stockholders	\$ (3,402)	\$ (6,977)	\$ (18,000)	\$ (1,922)	\$ (7,971)
Net loss per share attributable to common stockholders, basic and diluted ⁽¹⁾	\$ (0.59)	\$ (1.09)	\$ (2.67)	\$ (0.29)	\$ (1.15)
Weighted average common shares outstanding, basic and diluted ⁽¹⁾	5,725	6,395	6,748	6,686	6,913
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) ⁽²⁾			\$ (0.74)		\$ (0.27)
Pro forma weighted average common shares outstanding, basic and diluted (unaudited) ⁽²⁾			20,684		29,780

(1) See Note 11 to our consolidated financial statements appearing at the end of this prospectus for further details on the calculation of basic and diluted net loss per share attributable to common stockholders.

(2) See Note 12 to our consolidated financial statements appearing at the end of this prospectus for further details on the calculation of basic and diluted pro forma net loss per share attributable to common stockholders.

	As of March 31, 2015		
	Actual	Pro Forma ⁽²⁾	Pro Forma As Adjusted ⁽³⁾
(in thousands)			
Consolidated Balance Sheet Data:			
Cash, cash equivalents and investments	\$104,316	\$ 104,316	\$
Working capital ⁽¹⁾	101,649	101,649	
Total assets	108,628	108,628	
Preferred stock warrant liability	1,369	—	
Long-term debt, net of discount, including current portion	2,216	2,216	
Convertible preferred stock	136,053	—	
Total stockholders' equity (deficit)	(33,245)	104,177	

(1) We define working capital as current assets less current liabilities.

(2) The pro forma balance sheet data give effect to:

• the automatic conversion of all shares of our preferred stock outstanding as of March 31, 2015 into an aggregate of 22,866,987 shares of our common stock in connection with this offering; and

• the outstanding warrant to purchase our Series A-2 preferred stock becoming a warrant to purchase our common stock in connection with this offering.

(3) The pro forma as adjusted balance sheet data give further effect to the sale by us of _____ shares of our common stock in this offering at an assumed initial public offering price of \$ _____ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. A \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash, cash equivalents and investments, working capital, total assets and total stockholders' equity by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions. An increase or decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease each of cash, cash equivalents and investments, working capital, total assets and total stockholders' equity on a pro forma as adjusted basis by approximately \$ _____ million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our consolidated financial statements and the related notes and "Management's Discussion and Analysis of Results of Operations and Financial Condition," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Financial Position and Need for Additional Capital

We are a development-stage company and have incurred significant losses since our inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability.

Since inception, we have incurred significant operating losses. Our net loss was \$3.1 million for the year ended December 31, 2012, \$6.1 million for the year ended December 31, 2013, \$16.7 million for the year ended December 31, 2014 and \$1.7 million and \$8.0 million for the three months ended March 31, 2014 and 2015, respectively. As of March 31, 2015, we had an accumulated deficit of \$35.8 million. To date, we have financed our operations through private placements of our preferred stock, the issuance of convertible promissory notes and borrowings under our loan and security agreement, as amended, with Comerica Bank, or the loan and security agreement. We have devoted substantially all of our financial resources and efforts to developing our microbiome therapeutics platform, identifying potential product candidates and conducting pre-clinical studies and our clinical trial. We are in the early stages of development of our product candidates, and we have not completed development of any Ecobiotic microbiome therapeutics or other drugs or biologics. We expect to continue to incur significant expenses and operating losses for the foreseeable future. We anticipate that our expenses will increase substantially as we:

- conduct our Phase 2 clinical study of SER-109, our lead product candidate;
- continue the research and development of our other product candidates, including completing pre-clinical studies and commencing clinical trials for SER-262, SER-287 and SER-155;
- seek to enhance our microbiome therapeutics platform and discover and develop additional product candidates;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- potentially establish a sales, marketing and distribution infrastructure and scale-up manufacturing capabilities to commercialize any products for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- add clinical, scientific, operational, financial and management information systems and personnel, including personnel to support our product development and potential future commercialization efforts and to support our transition to a public company; and
- experience any delays or encounter any issues with any of the above, including but not limited to failed studies, complex results, safety issues or other regulatory challenges.

To become and remain profitable, we must succeed in developing and eventually commercializing products that generate significant revenue. This will require us to be successful in a range of challenging activities, including completing pre-clinical testing and clinical trials of our product candidates, discovering additional product candidates, obtaining regulatory approval for these product

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candidates and manufacturing, marketing and selling any products for which we may obtain regulatory approval. We are only in the preliminary stages of most of these activities. We may never succeed in these activities and, even if we do, may never generate revenue that is significant enough to achieve profitability.

Because of the numerous risks and uncertainties associated with pharmaceutical product and biological development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. If we are required by the U.S. Food and Drug Administration, or FDA, or the European Medicines Agency, or EMA, or other regulatory authorities to perform studies in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of any of our product candidates, our expenses could increase and revenue could be further delayed.

Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress our value and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings or even continue our operations.

Even if this offering is successful, we will need additional funding in order to complete development of our product candidates and commercialize our products, if approved. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

We expect our expenses to increase in connection with our ongoing activities, particularly as we conduct our Phase 2 clinical study of SER-109, and continue to research, develop and initiate clinical trials of SER-262, SER-287 and SER-155 and our other product candidates. In addition, if we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

We expect that our existing cash, cash equivalents and investments, together with anticipated net proceeds from this offering, will enable us to fund our operating expenses and capital expenditure requirements through at least . We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Our future capital requirements will depend on many factors, including:

- the progress and results of our Phase 2 clinical study of SER-109;
- the cost of manufacturing clinical supplies of our product candidates;
- the scope, progress, results and costs of pre-clinical development, laboratory testing and clinical trials for our other product candidates, including SER-262, SER-287 and SER-155;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs and timing of future commercialization activities, including manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;

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- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in businesses, products and technologies, including entering into licensing or collaboration arrangements for product candidates, although we currently have no commitments or agreements to complete any such transactions.

Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. Moreover, the terms of any financing may adversely affect the holdings or the rights of our stockholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our shares to decline. The sale of additional equity or convertible securities would dilute all of our stockholders. The incurrence of indebtedness could result in increased fixed payment obligations and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell, or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through arrangements with collaborators or others at an earlier stage than otherwise would be desirable and we may be required to relinquish rights to some of our technologies or product candidates or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects.

If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay, or discontinue one or more of our research or development programs or the commercialization of any product candidates, or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, financial condition and results of operations.

Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

Since our inception in October 2010, we have devoted substantially all of our resources to developing SER-109, researching SER-262, building our intellectual property portfolio, developing our supply chain, planning our business, raising capital and providing general and administrative support for these operations. All but one of our product candidates, SER-109, are still in pre-clinical development. We recently completed our Phase 1b/2 clinical study of SER-109, our lead product candidate, and dosed our first patient in a Phase 2 clinical study for this product candidate in May 2015, but have not completed any other clinical trials for this or any other product candidate. We have not yet demonstrated our ability to successfully complete any Phase 2 clinical study or any Phase 3 or other pivotal clinical trials, obtain regulatory approvals, manufacture a commercial scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Additionally, we expect our financial condition and operating results to continue to fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

Risks Related to the Discovery, Development and Regulatory Approval of Our Product Candidates

We are very early in our development efforts and may not be successful in our efforts to use our microbiome therapeutics platform to build a pipeline of product candidates and develop marketable drugs.

We are using our microbiome therapeutics platform to develop Ecobiotic microbiome therapeutics, with an initial focus on developing SER-109 for the prevention of further recurrences of CDI in patients suffering from recurrent CDI. While we believe our pre-clinical and Phase 1b/2 clinical data to date has validated our platform to a degree, we are at an early stage of development and our platform has not yet, and may never lead to, approvable or marketable drugs. We are developing additional product candidates that we intend to be used to prevent non-*Clostridium difficile* infection and to treat inflammatory and metabolic diseases. We may have problems applying our technologies to these other areas, and our new product candidates may not be as effective in preventing infection and disease as our initial product candidates. Even if we are successful in identifying additional product candidates, they may not be suitable for clinical development, including as a result of their harmful side effects, limited efficacy or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. The success of our product candidates will depend on several factors, including the following:

- completion of pre-clinical studies and clinical trials with positive results;
- receipt of marketing approvals from applicable regulatory authorities;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- making arrangements with third-party manufacturers for, or establishing our own, commercial manufacturing capabilities;
- launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;
- entering into new collaborations throughout the development process as appropriate, from pre-clinical studies through to commercialization;
- acceptance of our products, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining coverage and adequate reimbursement by third-party payors, including government payors, for our products, if approved;
- protecting our rights in our intellectual property portfolio;
- operating without infringing or violating the valid and enforceable patents or other intellectual property of third parties;
- maintaining a continued acceptable safety profile of the products following approval; and
- maintaining and growing an organization of scientists and business people who can develop and commercialize our products and technology.

If we do not successfully develop and commercialize product candidates based upon our technological approach, we will not be able to obtain product revenue in future periods, which likely would result in significant harm to our financial position and adversely affect our stock price.

Our product candidates are based on microbiome therapeutics, which is an unproven approach to therapeutic intervention.

All of our product candidates are based on microbiome therapy, a therapeutic approach that is designed to treat disease by restoring the function of a dysbiotic microbiome. We have not, nor to our knowledge has any other company, received regulatory approval for a therapeutic based on this approach. We cannot be certain that our approach will lead to the development of approvable or marketable products. In addition, our Ecobiotic microbiome therapeutics may have different effectiveness rates in various indications and in different geographical areas. Finally, the FDA or other regulatory agencies may lack experience in evaluating the safety and efficacy of products based on microbiome therapeutics, which could result in a longer than expected regulatory review process, increase our expected development costs and delay or prevent commercialization of our product candidates.

Our microbiome therapeutics platform relies on third parties for biological materials, including human stool. Some biological materials have not always met our expectations or requirements, and any disruption in the supply of these biological materials could materially adversely affect our business. For example, if any supplied biological materials are contaminated with disease organisms, we would not be able to use such biological materials. Although we have control processes and screening procedures, biological materials are susceptible to damage and contamination and may contain active pathogens. Improper storage of these materials, by us or any third-party suppliers, may require us to destroy some of our raw materials or products.

Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

We dosed our first patient in a Phase 2 clinical study of our lead product, SER-109, in May 2015. Our other product candidates are in pre-clinical development. It is impossible to predict when or if any of our product candidates will prove effective and safe in humans or will receive regulatory approval, and the risk of failure through the development process is high. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete pre-clinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failed clinical trial can occur at any stage of testing. The outcome of pre-clinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. For example, in anticipation of our Phase 2 clinical study of SER-109, we have refined the formulation of the inner capsule and changed the manufacturing process that we expect to use for commercial production. This formulation has not previously been clinically tested. The Phase 2 clinical study is the first clinical trial using this formulation and we cannot assure you that the results of this new formulation will be consistent with those experienced in the Phase 1b/2 clinical study of SER-109. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies, and we cannot be certain that we will not face similar setbacks.

In addition, we cannot be certain as to what type and how many clinical trials the FDA will require us to conduct before we may successfully gain approval to market SER-109 or any of our other product candidates. Prior to approving a new therapeutic product, the FDA generally requires that safety and efficacy be demonstrated in two adequate and well-controlled clinical trials. In some situations, evidence from a Phase 2 trial and a Phase 3 trial or from a single Phase 3 trial can be sufficient for

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FDA approval, such as in cases where the trial or trials provide highly reliable and statistically strong evidence of an important clinical benefit. In the course of our discussions with the FDA, the FDA has indicated that we may be required to conduct more than one Phase 3 clinical trial of SER-109 in order to gain approval. Additional clinical trials could cause us to incur significant development costs, delay or prevent the commercialization of SER-109 or otherwise adversely affect our business.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- regulators or institutional review boards may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- clinical trials of our product candidates may demonstrate undesirable side effects or produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we may have to suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our product candidates may be greater than we anticipate;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;
- regulators may revise the requirements for approving our product candidates, or such requirements may not be as we anticipate; and
- regarding trials managed by any future collaborators, our collaborators may face any of the above issues, and may conduct clinical trials in ways they view as advantageous to them but potentially suboptimal for us.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our product candidates;
- lose the support of any future collaborators, requiring us to bear more of the burden of development of certain compounds;
- not obtain marketing approval at all;

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- obtain marketing approval in some countries and not in others;
- obtain approval for indications or patient populations that are not as broad as we intend or desire;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

We recently completed our Phase 1b/2 clinical study of SER-109 and dosed our first patient in a Phase 2 clinical study for this product candidate in May 2015. Although most clinical research performed in the United States must be authorized in advance by the FDA under its investigational new drug application, or IND, regulations, we did not conduct our Phase 1b/2 clinical study under an IND pursuant to the FDA's exercise of enforcement discretion with regard to IND requirements for use of fecal microbiota for transplantation to treat CDI not responsive to standard therapies. Although the FDA provided confirmation that it intends to exercise enforcement discretion with respect to our Phase 1b/2 clinical study of SER-109, it stated that continued clinical evaluation of SER-109 will require an IND. In April 2015, the FDA authorized the conduct of our Phase 2 clinical study of SER-109 under an IND. We intend to conduct all future clinical studies of SER-109 under this IND. Unlike with SER-109, we expect that the FDA will require an IND before we initiate clinical testing of our other product candidates and may also require us to conduct more extensive pre-clinical tests prior to the start of clinical trials than were required for SER-109.

Our product development costs will increase if we experience delays in clinical testing or marketing approvals. We do not know whether any of our pre-clinical studies or clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant pre-clinical or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, potentially impairing our ability to successfully commercialize our product candidates and harming our business and results of operations.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. We are developing our lead product candidate, SER-109, to prevent further recurrences of CDI in patients suffering from recurrent CDI. We estimate the addressable population of patients with recurrent CDI to be between 85,000 and 110,000 patients per year in the United States, and accordingly, there is a limited number of patients from which to draw for clinical studies.

Patient enrollment is also affected by other factors including:

- the severity of the disease under investigation;
- the patient eligibility criteria for the study in question;
- the perceived risks and benefits of the product candidate under study;
- the availability of other treatments for the disease under investigation;
- the existence of competing clinical trials;
- the efforts to facilitate timely enrollment in clinical trials;

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- our payments for conducting clinical trials;
- the patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- the proximity and availability of clinical trial sites for prospective patients.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing.

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates or will not be able to do so as soon as anticipated, and our ability to generate revenue will be materially impaired.

Our product candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by the EMA and similar regulatory authorities outside the United States. Failure to obtain marketing approval for a product candidate in any jurisdiction will prevent us from commercializing the product candidate in that jurisdiction, and may affect our plans for commercialization in other jurisdictions as well. We have not received approval to market any of our product candidates from regulatory authorities in any jurisdiction. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third parties to assist us in this process. Securing marketing approval requires the submission of extensive pre-clinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive and may take many years. The scope and amount of clinical data required to obtain marketing approvals can vary substantially from jurisdiction to jurisdiction, and it may be difficult to predict whether a particular regulatory body will require additional or different studies than those conducted by a sponsor, especially for novel product candidates such as our Ecobiotic microbiome therapeutics. The FDA or foreign regulatory authorities may delay, limit, or deny approval to market our product candidates for many reasons, including: our inability to demonstrate that the clinical benefits of our product candidates outweigh any safety or other perceived risks; the regulatory authority's disagreement with the interpretation of data from nonclinical or clinical studies; the regulatory agency's requirement that we conduct additional pre-clinical studies and clinical trials; changes in marketing approval policies during the development period; changes in or the enactment of additional statutes or regulations, or changes in regulatory review process for each submitted product application; or the regulatory authority's failure to approve the manufacturing processes or third-party manufacturers with which we contract. Regulatory authorities have substantial discretion in the approval process and may refuse to accept a marketing application as deficient. In addition, varying interpretations of the data obtained from pre-clinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable. Of the large number of drugs in development, only a small percentage successfully complete the FDA or other regulatory approval processes and are commercialized.

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Furthermore, our product candidates may not receive marketing approval even if they achieve their specified endpoints in clinical trials. Clinical data is often susceptible to varying interpretations and many companies that have believed that their products performed satisfactorily in clinical trials have nonetheless failed to obtain FDA approval for their products. The FDA or foreign regulatory authorities may disagree with our trial design and our interpretation of data from nonclinical and clinical studies. Upon the FDA's review of data from any pivotal trial, it may request that the sponsor conduct additional analyses of the data and, if it believes the data are not satisfactory, could advise the sponsor to delay filing a marketing application.

Even if we eventually complete clinical testing and receive approval of a biologics license application, or BLA, or foreign marketing authorization for one of our product candidates, the FDA or the applicable foreign regulatory agency may grant approval contingent on the performance of costly additional clinical trials which may be required after approval. The FDA or the applicable foreign regulatory agency may also approve SER-109 for a more limited indication and/or a narrower patient population than we originally request, and the FDA, or applicable foreign regulatory agency, may not approve the labeling that we believe is necessary or desirable for the successful commercialization of SER-109. Any delay in obtaining, or inability to obtain, applicable regulatory approval would delay or prevent commercialization of SER-109 and would materially adversely impact our business and prospects.

The development of therapeutic products targeting the underlying biology of the human microbiome is an emerging field, and it is possible that the FDA and other regulatory authorities could issue regulations or new policies in the future affecting our Ecobiotic microbiome therapeutics that could adversely affect our product candidates.

If we experience delays in obtaining approval or if we fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired.

A fast track designation by the FDA may not actually lead to a faster development or regulatory review or approval process.

We may seek fast track designation for some of our product candidates. If a drug or biologic is intended for the treatment of a serious or life-threatening condition and nonclinical or clinical data demonstrate the potential to address unmet medical needs for this condition, the drug or biologic sponsor may apply for FDA fast track designation. Fast track designation provides increased opportunities for sponsor meetings with the FDA during pre-clinical and clinical development, in addition to the potential for rolling review once a marketing application is filed. The FDA has broad discretion whether or not to grant this designation, and even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive fast track designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. Fast track designation does not assure ultimate approval by the FDA. The FDA may withdraw fast track designation if it believes that the designation is no longer supported by data from our clinical development program.

A breakthrough therapy designation by the FDA for our product candidates may not lead to a faster development or regulatory review or approval process, and it does not increase the likelihood that our product candidates will receive marketing approval.

We may seek a breakthrough therapy designation for our product candidates. A breakthrough therapy is defined as a drug or biologic that is intended to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug or biologic may demonstrate

substantial improvement over existing therapies on one or more clinically significant endpoints. For drugs that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor can help to identify the most efficient path for clinical development. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. The availability of breakthrough therapy designation was established recently with the passage of the Food and Drug Administration Safety and Innovation Act of 2012, and the FDA has only recently released additional guidance as to the criteria it uses in designating drugs as breakthrough therapies. As a result, we cannot be sure that our evaluation of our product candidates as qualifying for breakthrough therapy designation will meet the FDA's expectations. In any event, the receipt of a breakthrough therapy designation for a product candidate may not result in a faster development process, review or approval compared to conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that the products no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

We may seek orphan drug designation for some of our product candidates, but may not be able to obtain it.

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs and biologics for relatively small patient populations as orphan drugs. In the United States, the FDA may designate a drug or biologic as an orphan drug if it is intended to treat a rare disease or condition, which is defined as a disease or condition that affects fewer than 200,000 individuals annually in the United States.

Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same drug or biologic for that time period. The applicable period is seven years in the United States and ten years in Europe. The European exclusivity period can be reduced to six years if a product no longer meets the criteria for orphan drug designation or if the product is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug or biologic to meet the needs of patients with the rare disease or condition.

We may seek orphan drug designation and exclusivity for some of our product candidates. However, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

Risks Related to our Dependence on Third Parties and Manufacturing

We rely, and expect to continue to rely, on third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

We expect to continue to rely on third parties, such as contract research organizations, or CROs, clinical data management organizations, medical institutions and clinical investigators, to conduct and manage our clinical trials, including our Phase 2 clinical study of SER-109.

Our reliance on these third parties for research and development activities will reduce our control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with regulatory standards, commonly referred to as good clinical practices, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, safety and welfare of trial participants are protected. Other countries' regulatory agencies also have requirements for clinical trials with which we must comply. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, *ClinicalTrials.gov*, within specified timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, do not meet expected deadlines, experience work stoppages, terminate their agreements with us or need to be replaced, or do not conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we may need to enter into new arrangements with alternative third parties, which could be difficult, costly or impossible, and our clinical trials may be extended, delayed, or terminated or may need to be repeated. If any of the foregoing occur, we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and may not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates.

We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, producing additional losses and depriving us of potential product revenue.

We rely on third parties for the manufacture of our product candidates for pre-clinical and clinical testing and expect to continue to do so for the foreseeable future. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or that such quantities may not be available at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for pre-clinical and clinical testing, as well as for commercial manufacture if any of our product candidates receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates on a timely basis or at all, or that such quantities will be available at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

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We may be unable to establish any agreements with third-party manufacturers on acceptable terms or at all. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- failure of third-party manufacturers to comply with regulatory requirements and maintain quality assurance;
- breach of manufacturing agreements by the third-party manufacturers;
- failure to manufacture our product according to our specifications;
- failure to manufacture our product according to our schedule or at all;
- misappropriation or disclosure of our proprietary information, including our trade secrets and know-how; and
- termination or nonrenewal of agreements by third-party manufacturers at times that are costly or inconvenient for us.

Third-party manufacturers may not be able to comply with current good manufacturing processes, or cGMP, regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocations, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products. The contract manufacturer we rely on to produce SER-109 has never produced a FDA-approved therapeutic. If our contract manufacturer is unable to comply with cGMP regulation or if the FDA does not approve their facility upon a pre-approval inspection, SER-109 may not be approved or may be delayed in obtaining approval. In addition, there are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing our products. Therefore, our product candidates and any future products that we may develop may compete with other products for access to manufacturing facilities. Any failure to gain access to these limited manufacturing facilities could severely impact the clinical development, marketing approval and commercialization of our product candidates.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. Except for a backup facility in California, we do not currently have arrangements in place for redundant supply or a second source for required raw materials used in the manufacture of our product candidates or for the manufacture of finished SER-109 product. If our current contract manufacturers cannot perform as agreed, we may be required to replace such manufacturers and we may be unable to replace them on a timely basis or at all. Our current and anticipated future dependence upon others for the manufacture of our product candidates or products could delay, prevent or impair our development and commercialization efforts.

We have no experience manufacturing our product candidates at commercial scale, and if we decide to establish our own manufacturing facility, we cannot assure you that we can manufacture our product candidates in compliance with regulations at a cost or in quantities necessary to make them commercially viable.

We have a pilot manufacturing facility at our Cambridge location where we conduct process development, scale-up activities and a portion of the manufacture of Ecobiotic microbiome therapeutics. The FDA and other comparable foreign regulatory agencies must, pursuant to inspections that are conducted after submitting a BLA or relevant foreign marketing submission, confirm that the manufacturing processes for the product meet cGMP. We do not have any manufacturing facilities that meet the FDA's cGMP requirements for the production of any product candidates used in humans.

We may establish a manufacturing facility for our product candidates for production at a commercial scale. We have no experience in commercial-scale manufacturing of our product candidates. We currently intend to develop our manufacturing capacity in part by expanding our current facility or building additional facilities. This activity will require substantial additional funds and we would need to hire and train significant numbers of qualified employees to staff these facilities. We may not be able to develop commercial-scale manufacturing facilities that are adequate to produce materials for additional later-stage clinical trials or commercial use.

The equipment and facilities employed in the manufacture of pharmaceuticals are subject to stringent qualification requirements by regulatory agencies, including validation of facility, equipment, systems, processes and analytics. We may be subject to lengthy delays and expense in conducting validation studies, if we can meet the requirements at all.

Risks Related to Commercialization of Our Product Candidates and Other Legal Compliance Matters

Even if any of our product candidates receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, hospitals, third-party payors and others in the medical community necessary for commercial success.

If any of our product candidates receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. For example, current CDI treatment involves the use of antibiotics that are well established in the medical community or the use of fecal microbiota transplantation, or FMT, and physicians may continue to rely on these treatments. If our product candidates receive approval but do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable. The degree of market acceptance of our approved product candidates, if any, will depend on a number of factors, including:

- their efficacy, safety and other potential advantages compared to alternative treatments;
- the clinical indications for which our products are approved;
- our ability to offer them for sale at competitive prices;
- their convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement for our product candidates;
- the prevalence and severity of their side effects and their overall safety profiles;
- any restrictions on the use of our products together with other medications;
- interactions of our products with other medicines patients are taking; and
- inability of certain types of patients to take our product.

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We currently have no sales organization. If we are unable to establish effective sales, marketing and distribution capabilities or enter into agreements with third parties with such capabilities, we may not be successful in commercializing our product candidates if and when they are approved.

We do not have a sales or marketing infrastructure and have no experience in the sale, marketing or distribution of pharmaceutical products. To achieve commercial success for any product for which we obtain marketing approval, we will need to establish a sales and marketing organization or make arrangements with third parties to perform sales and marketing functions and we may not be successful in doing so.

In the future, we expect to build a focused sales and marketing infrastructure to market or co-promote our product candidates in the United States and potentially elsewhere, if and when they are approved. There are risks involved with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force is expensive and time-consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize our products on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or educate physicians on the benefits of our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines;
- unforeseen costs and expenses associated with creating an independent sales and marketing organization; and
- inability to obtain sufficient coverage and reimbursement from third-party payors and governmental agencies.

Outside the United States, we may rely on third parties to sell, market and distribute our product candidates. We may not be successful in entering into arrangements with such third parties or may be unable to do so on terms that are favorable to us. In addition, our product revenue and our profitability, if any, may be lower if we rely on third parties for these functions than if we were to market, sell and distribute any products that we develop ourselves. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

We face substantial competition, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.

The development and commercialization of new drug and biologic products is highly competitive and is characterized by rapid and substantial technological development and product innovations. We face competition with respect to our current product candidates, and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies

worldwide. We are aware of a number of large pharmaceutical and biotechnology companies, including Merck, Shire, Sanofi, Pfizer and Novartis, as well as smaller, early-stage companies, that are pursuing the development of products, including microbiome therapeutics, for the prevention of CDI and other disease indications we are targeting. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others may be based on entirely different approaches. For example, FMT is a procedure that has resulted in high cure rates for recurrent CDI and our competitors and physicians may continue to seek to standardize and implement this procedure. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources, established presence in the market and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and reimbursement and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors.

These third parties compete with us in recruiting and retaining qualified scientific, sales and marketing and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market, especially for any competitor developing a microbiome therapeutic which will likely share our same regulatory approval requirements. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic or biosimilar products.

Even if we are able to commercialize any product candidates, the products may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, any of which would harm our business.

Our ability to commercialize any product candidates successfully will depend, in part, on the extent to which coverage and reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels.

Obtaining and maintaining adequate reimbursement for our products may be difficult. We cannot be certain if and when we will obtain an adequate level of reimbursement for our products by third-party payors. Even if we do obtain adequate levels of reimbursement, third-party payors, such as government or private healthcare insurers, carefully review and increasingly question the coverage of, and challenge the prices charged for, drugs. Reimbursement rates from private health insurance companies vary depending on the company, the insurance plan and other factors. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs. We

may also be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of reimbursement relative to other therapies. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control, including possible price reductions, even after initial approval is granted. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval. There can be no assurance that our product candidates, if they are approved for sale in the United States or in other countries, will be considered medically necessary for a specific indication or cost-effective, or that coverage or an adequate level of reimbursement will be available.

Product liability lawsuits against us could cause us to incur substantial liabilities and limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the testing of our product candidates in clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- regulatory investigations, product recalls or withdrawals, or labeling, marketing or promotional restrictions;
- decreased demand for any product candidates or products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;

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- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to commercialize any products that we may develop.

We currently hold \$3.0 million in product liability insurance coverage in the aggregate, with a per occurrence limit of \$3.0 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of our product candidates. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

We may face competition from biosimilars, which may have a material adverse impact on the future commercial prospects of our product candidates.

Even if we are successful in achieving regulatory approval to commercialize a product candidate faster than our competitors, we may face competition from biosimilars. In the United States, the Biologics Price Competition and Innovation Act, or BCPIA, enacted in 2010 as part of the Patient Protection and Affordable Care Act, created an abbreviated approval pathway for biological products that are demonstrated to be “highly similar,” or biosimilar, to or “interchangeable” with an FDA-approved biological product. This new pathway could allow competitors to reference data from innovative biological products 12 years after the time of approval of the innovative biological product. This data exclusivity does not prevent another company from developing a product that is highly similar to the innovative product, generating its own data and seeking approval. Data exclusivity only assures that another company cannot rely upon the data within the innovator’s application to support the biosimilar product’s approval.

In each of his proposed budgets for fiscal years 2013 through 2015, President Obama has proposed to cut this 12-year period of exclusivity down to seven years. He also proposed to prohibit additional periods of exclusivity due to minor changes in product formulations, a practice often referred to as “evergreening.” It is possible that Congress may take these or other measures to reduce or eliminate periods of exclusivity. The BCPIA is complex and only beginning to be interpreted and implemented by the FDA. As a result, its ultimate impact is subject to uncertainty. The FDA has issued several guidance documents to date discussing the biosimilar pathway, and the FDA recently approved the first biosimilar under the BCPIA in March 2015. However, several issues still remain unclear with respect to the FDA’s final implementation of the BCPIA, and such FDA implementation could have a material adverse effect on the future commercial prospects for our product candidates.

In Europe, the European Commission has granted marketing authorizations for several biosimilars pursuant to a set of general and product class-specific guidelines for biosimilar approvals issued over the past few years. In Europe, a competitor may reference data supporting approval of an innovative biological product, but will not be able to get on the market until 10 years after the time of approval of the innovative product. This 10-year marketing exclusivity period will be extended to 11 years if, during the first eight of those 10 years, the marketing authorization holder obtains an approval for one or more new therapeutic indications that bring significant clinical benefits compared with existing therapies. In addition, companies may be developing biosimilars in other countries that could compete with our products. If competitors are able to obtain marketing approval for biosimilars referencing our products, our products may become subject to competition from such biosimilars, with the attendant competitive pressure and consequences.

Failure to obtain marketing approval in international jurisdictions would prevent our product candidates from being marketed abroad.

In order to market and sell our products in the European Union and many other jurisdictions, we or our collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval in foreign countries may differ substantially from that required to obtain FDA approval. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We or our collaborators may not obtain approvals for our product candidates from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. However, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market.

Any product candidate for which we obtain marketing approval could be subject to post-marketing restrictions or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.

Any product candidate for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to the continual requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. We and our contract manufacturers will also be subject to continual review and periodic inspections to assess compliance with cGMP. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to specific conditions of approval, including a requirement to implement a risk evaluation and mitigation strategy, or REMS, which could include requirements for a medication guide, communication plan, or restricted distribution system. If any of our product candidates receives marketing approval, the accompanying label may limit the approved use of our drug, which could limit sales of the product.

The FDA may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of our approved products. The FDA closely regulates the post-approval marketing and promotion of drugs and biologics to ensure they are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use, and if we market our products outside of their approved indications, we may be subject to enforcement action for off-label marketing. Violations of the FDA's restrictions relating to the promotion of prescription drugs may also lead to investigations alleging violations of federal and state health care fraud and abuse laws, as well as state consumer protection laws.

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In addition, if a regulatory agency or we later discover previously unknown problems with our products, such as adverse events of unanticipated severity or frequency, problems with manufacturers or manufacturing processes, or failure to comply with regulatory requirements, the regulatory agency may impose restrictions on the products or us, including requiring withdrawal of the product from the market. Any failure to comply with applicable regulatory requirements may yield various results, including:

- litigation involving patients taking our products;
- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters;
- withdrawal of products from the market;
- suspension or termination of ongoing clinical trials;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- damage to relationships with potential collaborators;
- unfavorable press coverage and damage to our reputation;
- refusal to permit the import or export of our products;
- product seizure or detention;
- injunctions; or
- imposition of civil or criminal penalties.

Noncompliance with similar European Union requirements regarding safety monitoring or pharmacovigilance can also result in significant financial penalties. Similarly, failure to comply with U.S. and foreign regulatory requirements regarding the development of products for pediatric populations and the protection of personal health information can also lead to significant penalties and sanctions.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenues. If regulatory sanctions are applied or if regulatory approval is withheld or withdrawn, the value of our company and our operating results will be adversely affected.

Our relationships with customers, physicians and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from governmental healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors, physicians and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program, such as Medicare and Medicaid;
- the federal False Claims Act imposes criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal Physician Payment Sunshine Act requires applicable manufacturers of covered drugs to report payments and other transfers of value to physicians and teaching hospitals, and ownership and investment interests held by physicians and their immediate family members. Data from the first reporting period, which began in August 2013, is now publicly available. Manufacturers will be required to submit subsequent reports to the government by the 90th day of each calendar year;
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and
- state and foreign laws that govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open

to a variety of interpretations. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. The shifting compliance environment and the need to build and maintain a robust system to comply with multiple jurisdictions with different compliance and reporting requirements increases the possibility that a healthcare company may violate one or more of the requirements.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, changed the way Medicare covers and pays for pharmaceutical products. The MMA expanded Medicare coverage for outpatient drug purchases by those covered by Medicare under a new Part D and introduced a new reimbursement methodology based on average sales prices for Medicare Part B physician-administered drugs. In addition, the MMA authorized Medicare Part D prescription drug plans to limit the number of drugs that will be covered in any therapeutic class in their formularies. The MMA's cost reduction initiatives and other provisions could decrease the coverage and price that we receive for any approved products. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors. Similar regulations or reimbursement policies may be enacted in international markets which could similarly impact our business.

More recently, in 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the Affordable Care Act, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms.

Among the provisions of the Affordable Care Act of importance to our potential product candidates are the following:

- establishment of a new pathway for approval of lower-cost biosimilars to compete with biologic products, such as those we are developing;
- an annual, nondeductible fee payable by any entity that manufactures or imports specified branded prescription drugs and biologic agents;

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- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers and enhanced penalties for noncompliance;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements to report financial arrangements with physicians and teaching hospitals;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical effectiveness research, along with funding for such research.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and, due to subsequent legislative amendments, will remain in effect through 2024 unless additional Congressional action is taken. On January 2, 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, including hospitals. These new laws may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain.

We expect that the Affordable Care Act, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.

In some countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with

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governmental authorities can take considerable time after the receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after coverage and reimbursement have been obtained. Reference pricing used by various European Union member states and parallel distribution or arbitrage between low-priced and high-priced member states, can further reduce prices. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If coverage and reimbursement of our products are unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed, possibly materially.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials such as human stool. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Risks Related to Our Intellectual Property

If we are unable to adequately protect our proprietary technology, or obtain and maintain issued patents which are sufficient to protect our product candidates, others could compete against us more directly, which would have a material adverse impact on our business, results of operations, financial condition and prospects.

Our success depends in large part on our ability to obtain and maintain patent and other intellectual property protection in the United States and other countries with respect to our proprietary technology and products. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies and product candidates. We also rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost, in a timely manner,

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or in all jurisdictions. Prosecution of our patent portfolio is at a very early stage, and we are just beginning to reach the statutory deadlines for deciding whether and where to initiate prosecution in specific foreign jurisdictions by filing national state applications based on our Patent Cooperation Treaty, or PCT, applications. As those deadlines come due, we will have to decide whether and where to pursue patent protection for the various inventions claimed in our patent portfolio, and we will only have the opportunity to obtain patents in those jurisdictions where we pursue protection. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. It is possible that defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, such as, with respect to proper priority claims, inventorship, claim scope or patent term adjustments. If there are material defects in the form or preparation of our patents or patent applications, such patents or applications may be invalid and unenforceable. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business, financial condition and operating results.

If, in the future, we obtain licenses from third parties, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. We may also require the cooperation of our licensors to enforce any licensed patent rights, and such cooperation may not be provided. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. Moreover, if we do obtain necessary licenses, we will likely have obligations under those licenses, and any failure to satisfy those obligations could give our licensor the right to terminate the license. Termination of a necessary license could have a material adverse impact on our business.

Our patent portfolio is in the early stages of prosecution. We currently have three issued U.S. patents. Although we have numerous patent applications pending, substantive prosecution has begun in only a small number of those applications. We cannot provide any assurances that any of our pending patent applications will mature into issued patents and, if they do, that such patents or our current patents will include claims with a scope sufficient to protect our product candidates or otherwise provide any competitive advantage. For example, we are pursuing claims to therapeutic, binary compositions of certain bacterial populations. Any claims that may issue may provide coverage for such binary compositions and/or their use. However, such claims would not prevent a third party from commercializing alternative compositions that do not include both of the bacterial populations claimed in pending applications, potential applications or patents that have or may issue. There can be no assurance that any such alternative composition will not be equally effective. Further, given that our SER-109 product candidate is a complex composition with some variation from lot-to-lot and that, likewise, third-party compositions may have similar complexity and variability, it is possible that a patent claim may provide coverage for some but not all lots of a product candidate or third-party product. These and other factors may provide opportunities for our competitors to design around our patents, should they issue.

Moreover, other parties have developed technologies that may be related or competitive to our approach, and may have filed or may file patent applications and may have received or may receive patents that may overlap or conflict with our patent applications, either by claiming similar methods or by claiming subject matter that could dominate our patent position. In addition, given the early stage of prosecution of our portfolio, it may be some time before we understand how patent offices react to our patent claims and whether they identify prior art of relevance that we have not already considered.

Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we

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were the first to make the inventions claimed in any owned patents or pending patent applications, or that we were the first to file for patent protection of such inventions, nor can we know whether those from whom we may license patents were the first to make the inventions claimed or were the first to file. For these and other reasons, the issuance, scope, validity, enforceability and commercial value of our patent rights are subject to a level of uncertainty. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

We may be subject to a third-party preissuance submission of prior art to the United States Patent and Trademark Office, or USPTO, or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. Furthermore, an adverse decision in an interference proceeding can result in a third party receiving the patent right sought by us, which in turn could affect our ability to develop, market or otherwise commercialize our product candidates. The issuance, scope, validity, enforceability and commercial value of our patents are subject to a level of uncertainty.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. Due to legal standards relating to patentability, validity, enforceability and claim scope of patents covering biotechnological and pharmaceutical inventions, our ability to obtain, maintain and enforce patents is uncertain and involves complex legal and factual questions. Even if issued, a patent's validity, inventorship, ownership or enforceability is not conclusive. Accordingly, rights under any existing patent or any patents we might obtain or license may not cover our product candidates, or may not provide us with sufficient protection for our product candidates to afford a commercial advantage against competitive products or processes, including those from branded and generic pharmaceutical companies.

The degree of future protection for our proprietary rights is uncertain, and we cannot ensure that:

- any of our pending patent applications, if issued, will include claims having a scope sufficient to protect our product candidates or any other products or product candidates;
- any of our pending patent applications will issue as patents at all;
- we will be able to successfully commercialize our product candidates, if approved, before our relevant patents expire;
- we were the first to make the inventions covered by any existing patent and pending patent applications;
- we were the first to file patent applications for these inventions;
- others will not develop similar or alternative technologies that do not infringe or design around our patents;
- others will not use pre-existing technology to effectively compete against us;
- any of our patents, if issued, will be found to ultimately be valid and enforceable;
- third parties will not compete with us in jurisdictions where we do not pursue and obtain patent protection;

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- we will be able to obtain and/or maintain necessary or useful licenses on reasonable terms or at all;
- any patents issued to us will provide a basis for an exclusive market for our commercially viable products, will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies or product candidates that are separately patentable; or
- our commercial activities or products will not infringe upon the patents or proprietary rights of others.

Any litigation to enforce or defend our patent rights, even if we were to prevail, could be costly and time-consuming and would divert the attention of our management and key personnel from our business operations. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful. Even if we are successful, domestic or foreign litigation, or USPTO or foreign patent office proceedings, may result in substantial costs and distraction to our management. We may not be able, alone or with our licensors or potential collaborators, to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other proceedings, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or other proceedings. In addition, during the course of this kind of litigation or proceedings, there could be public announcements of the results of hearings, motions or other interim proceedings or developments or public access to related documents. If investors perceive these results to be negative, the market price for our common stock could be significantly harmed.

If we are unable to protect the confidentiality of our trade secrets and know-how, our business and competitive position would be harmed.

In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also seek to enter into confidentiality and invention or patent assignment agreements with our employees, advisors and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Our trade secrets may also be obtained by third parties by other means, such as breaches of our physical or computer security systems. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Moreover, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biotechnology companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biotechnology industry involves both technological and legal complexity, and is therefore costly, time-consuming and

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inherently uncertain. In addition, recent patent reform legislation could further increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, in particular the first to file provisions, only became effective on March 16, 2013. A third party that files a patent application in the USPTO after that date but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by the third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application. Thus, for our U.S. patent applications containing a priority claim after March 16, 2013, there is a greater level of uncertainty in the patent law. Moreover, some of the patent applications in our portfolio will be subject to examination under the pre-Leahy-Smith Act law and regulations, while other patents applications in our portfolio will be subject to examination under the law and regulations, as amended by the Leahy-Smith Act. This introduces additional complexities into the prosecution and management of our portfolio.

In addition, the Leahy-Smith Act limits where a patentee may file a patent infringement suit and provides opportunities for third parties to challenge any issued patent in the USPTO. These provisions apply to all of our U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal court necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a federal court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims because it may be easier for them to do so relative to challenging the patent in a federal court action. It is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

In addition, recent United States Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. From time to time, the U.S. Supreme Court, other federal courts, the United States Congress, or the USPTO, may change the standards of patentability and any such changes could have a negative impact on our business.

A number of recent cases decided by the Supreme Court have involved questions of when claims reciting abstract ideas, laws of nature, natural phenomena and/or natural products are eligible for a patent, regardless of whether the claimed subject matter is otherwise novel and inventive. These cases include *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 12-398 (2013) or Myriad; *Alice Corp. v. CLS Bank International*, 573 U.S. 13-298 (2014); and *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, or Prometheus, 566 U.S. 10-1150 (2012). In response to these cases, the USPTO has issued guidance to the examining corps.

The full impact of these decisions is not yet known. The Myriad decision, issued on June 13, 2013, is the most recent Supreme Court decision to address patent eligibility of natural products. Our current product candidates include natural products, therefore, this decision and its interpretation by the courts and the USPTO may impact prosecution, defense and enforcement of our patent portfolio. In Myriad, the Court held that claims to isolated genomic DNA are not patentable, but claims to complementary DNA, or cDNA, molecules, which are not genomic sequences, may be patent eligible

because they are not a natural product. The effect of the decision on patents for other isolated natural products is uncertain. However, on March 4, 2014, the USPTO issued a memorandum to patent examiners providing guidance for examining claims that recite laws of nature, natural phenomena or natural products under the Myriad and Prometheus decisions. The guidance did not limit the application of Myriad to DNA but, rather, applied the decision broadly to other natural products, which may include our product candidates. The March 4, 2014 memorandum and the USPTO's interpretation of the cases and announced examination rubric received widespread criticism from stakeholders during a public comment period and was superseded by interim guidance published on December 15, 2014. The USPTO's interpretation of the case law and new guidelines for examination may influence, possibly adversely, prosecution and defense of certain types of claims in our portfolio.

In addition to increasing uncertainty with regard to our ability to obtain future patents, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on these and other decisions by Congress, the federal courts and the USPTO, the laws and regulations governing patents could change or be interpreted in unpredictable ways that would weaken our ability to obtain new patents or to enforce any patents that may issue to us in the future. In addition, these events may adversely affect our ability to defend any patents that may issue in procedures in the USPTO or in courts.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability, and the ability of our collaborators, to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. While no such litigation has been brought against us and we have not been held by any court to have infringed a third party's intellectual property rights, we cannot guarantee that our technology, products or use of our products do not infringe third-party patents.

Numerous patents and pending applications are owned by third parties in the fields in which we are developing product candidates, both in the United States and elsewhere. It is also possible that we have failed to identify relevant third-party patents or applications. For example, applications filed before November 29, 2000 and certain applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Moreover, it is difficult for industry participants, including us, to identify all third-party patent rights that may be relevant to our product candidates and technologies because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. We may fail to identify relevant patents or patent applications or may identify pending patent applications of potential interest but incorrectly predict the likelihood that such patent applications may issue with claims of relevance to our technology. In addition, we may be unaware of one or more issued patents that would be infringed by the manufacture, sale or use of a current or future product candidate, or we may incorrectly conclude that a third-party patent is invalid, unenforceable or not infringed by our activities. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our technologies, our products or the use of our products. We are aware of several pending patent applications containing one or more claims that could be construed to cover some of our product candidates or technology, should those claims issue in their original form or in the form presently being pursued. In addition, we are aware of a third-party patent family that includes issued and allowed patents, including in the United States, with claims that, if valid and enforceable, could be construed to cover some of our product candidates or their methods of use.

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The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. Other parties may allege that our product candidates or the use of our technologies infringes patent claims or other intellectual property rights held by them or that we are employing their proprietary technology without authorization. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology, including interference or derivation proceedings before the USPTO and similar bodies in other countries. Third parties may assert infringement claims against us based on existing intellectual property rights and intellectual property rights that may be granted in the future. If we were to challenge the validity of an issued U.S. patent in court, such as an issued U.S. patent of potential relevance to some of our product candidates or methods of use, we would need to overcome a statutory presumption of validity that attaches to every U.S. patent. This means that in order to prevail, we would have to present clear and convincing evidence as to the invalidity of the patent's claims. There is no assurance that a court would find in our favor on questions of infringement or validity.

Patent and other types of intellectual property litigation can involve complex factual and legal questions, and their outcome is uncertain. If we are found, or believe there is a risk we may be found, to infringe a third party's intellectual property rights, we could be required or may choose to obtain a license from such third party to continue developing and marketing our products and technology. However, we may not be able to obtain any such license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

Even if we are successful in these proceedings, we may incur substantial costs and divert management time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court, or redesign our products. Patent litigation is costly and time-consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, intellectual property litigation or claims could force us to do one or more of the following:

- cease developing, selling or otherwise commercializing our product candidates;
- pay substantial damages for past use of the asserted intellectual property;
- obtain a license from the holder of the asserted intellectual property, which license may not be available on reasonable terms, if at all; and
- in the case of trademark claims, redesign, or rename, some or all of our product candidates or other brands to avoid infringing the intellectual property rights of third parties, which may not be possible and, even if possible, could be costly and time-consuming.

Any of these risks coming to fruition could have a material adverse effect on our business, results of operations, financial condition and prospects.

Issued patents covering our product candidates could be found invalid or unenforceable or could be interpreted narrowly if challenged in court.

Competitors may infringe our intellectual property, including our patents or the patents of our licensors. As a result, we may be required to file infringement claims to stop third-party infringement or unauthorized use. This can be expensive, particularly for a company of our size, and time-consuming. If we initiated legal proceedings against a third party to enforce a patent, if and when issued, covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include alleged failures to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement, or failure to claim patent eligible subject matter. Grounds for unenforceability assertions include allegations that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review and equivalent proceedings in foreign jurisdictions, such as opposition proceedings. Such proceedings could result in revocation or amendment of our patents in such a way that they no longer cover our product candidates or competitive products. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to validity, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Moreover, even if not found invalid or unenforceable, the claims of our patents could be construed narrowly or in a manner that does not cover the allegedly infringing technology in question. Such a loss of patent protection would have a material adverse impact on our business.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for noncompliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent and, in some jurisdictions, during the pendency of a patent application. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

It is our policy to enter into confidentiality and intellectual property assignment agreements with our employees, consultants, contractors and advisors. These agreements generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual

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property rights to us. For example, even if we have a consulting agreement in place with an academic advisor pursuant to which such academic advisor is required to assign any inventions developed in connection with providing services to us, such academic advisor may not have the right to assign such inventions to us, as it may conflict with his or her obligations to assign all such intellectual property to his or her employing institution.

Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. We may also engage advisors and consultants who are concurrently employed at universities or other organizations or who perform services for other entities. Although we try to ensure that our employees, advisors and consultants do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, advisors or consultants have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such party's former or current employer or in violation of an agreement with another party. Although we have no knowledge of any such claims being alleged to date, if such claims were to arise, litigation may be necessary to defend against any such claims.

In addition, while it is our policy to require our employees, consultants, advisors and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property. Similarly, we may be subject to claims that an employee, advisor or consultant performed work for us that conflicts with that person's obligations to a third party, such as an employer, and thus, that the third party has an ownership interest in the intellectual property arising out of work performed for us. Litigation may be necessary to defend against these claims. Although we have no knowledge of any such claims being alleged to date, if such claims were to arise, litigation may be necessary to defend against any such claims.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to management.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition

among potential collaborators or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our financial condition or results of operations.

We will not seek to protect our intellectual property rights in all jurisdictions throughout the world and we may not be able to adequately enforce our intellectual property rights even in the jurisdictions where we seek protection.

Filing, prosecuting and defending patents on product candidates in all countries and jurisdictions throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States could be less extensive than in the United States, assuming that rights are obtained in the United States and assuming that rights are pursued outside the United States. The statutory deadlines for pursuing patent protection in individual foreign jurisdictions are based on the priority date of each of our patent applications. For all of the patent families in our portfolio, including the families that may provide coverage for our lead product candidates, the relevant statutory deadlines have not yet expired. Therefore, for each of the patent families that we believe provide coverage for our lead product candidates, we will need to decide whether and where to pursue protection outside the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, even if we do elect to pursue patent rights outside the United States, we may not be able to obtain relevant claims and/or we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions.

Competitors may use our technologies in jurisdictions where we do not pursue and obtain patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Even if we pursue and obtain issued patents in particular jurisdictions, our patent claims or other intellectual property rights may not be effective or sufficient to prevent third parties from so competing.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property protection, especially those relating to biotechnology. This could make it difficult for us to stop the infringement of our patents, if obtained, or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, many countries limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries.

If our ability to obtain and, if obtained, enforce our patents to stop infringing activities is inadequate, third parties may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Accordingly, our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property we develop or license.

**Risks Related to Employee Matters and Managing Growth and Other Risks
Related to Our Business**

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on Roger Pomerantz, our President and Chief Executive Officer, as well as the other principal members of our management, scientific and clinical team, including Eric Shaff, our Chief Financial Officer and Executive Vice President, David Cook, our Chief Scientific Officer and Executive Vice President of Research & Development, John Aunins, our Chief Technology Officer and Executive Vice President of Bioprocess Development, Michele Trucksis, our Chief Medical Officer and Executive Vice President, and Matthew Henn, our Head of Drug Discovery & Bioinformatics and Vice President. Although we have entered into employment letter agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain “key person” insurance for any of our executives or other employees.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We expect to expand our development and regulatory capabilities and potentially implement sales, marketing and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of lead discovery and product development, regulatory affairs, clinical affairs and manufacturing and, if any of our product candidates receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train

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additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

A variety of risks associated with operating internationally could materially adversely affect our business.

We currently have limited international operations, but our business strategy incorporates potentially expanding internationally if any of our product candidates receive regulatory approval. We currently plan to rely on collaborators to commercialize any approved products outside of the United States. Doing business internationally involves a number of risks, including but not limited to:

- multiple, conflicting and changing laws and regulations, such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements and other governmental approvals, permits and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our products in various countries;
- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes, government payors or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, terrorism and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions;
- certain expenses including, among others, expenses for travel, translation and insurance; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act, or FCPA, its books and records provisions, or its anti-bribery provisions.

Any of these factors could significantly harm our future international expansion and operations and, consequently, our results of operations.

Our business and operations would suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our current and future contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we are not aware of any such material system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties to manufacture our product candidates and conduct clinical trials, and similar events relating to their

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computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed.

Acquisitions or joint ventures could disrupt our business, cause dilution to our stockholders and otherwise harm our business.

We may acquire other businesses, products or technologies as well as pursue strategic alliances, joint ventures, technology licenses or investments in complementary businesses. We have not made any acquisitions to date, and our ability to do so successfully is unproven. Any of these transactions could be material to our financial condition and operating results and expose us to many risks, including:

- disruption in our relationships with future customers or with current or future distributors or suppliers as a result of such a transaction;
- unanticipated liabilities related to acquired companies;
- difficulties integrating acquired personnel, technologies and operations into our existing business;
- diversion of management time and focus from operating our business to acquisition integration challenges;
- increases in our expenses and reductions in our cash available for operations and other uses;
- possible write-offs or impairment charges relating to acquired businesses; and
- inability to develop a sales force for any additional product candidates.

Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries.

Also, the anticipated benefit of any acquisition may not materialize. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future joint ventures or acquisitions, or the effect that any such transactions might have on our operating results.

Risks Related to Our Common Stock and this Offering

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock was determined through negotiations with the underwriters. Although we have applied to list our common stock on The NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares or at all.

The price of our common stock may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our common stock in this offering.

Our stock price is likely to be volatile. The stock market in general and the market for smaller biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including:

- the success of competitive products or technologies;
- actual or anticipated changes in our growth rate relative to our competitors;
- results of clinical trials of our product candidates or those of our competitors;
- developments related to any future collaborations;
- regulatory or legal developments in the United States and other countries;
- development of new product candidates that may address our markets and may make our product candidates less attractive;
- changes in physician, hospital or healthcare provider practices that may make our product candidates less useful;
- announcements by us, our partners or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this “Risk Factors” section.

After this offering, our executive officers, directors and principal stockholders, if they choose to act together, will continue to have the ability to control or significantly influence all matters submitted to stockholders for approval.

Upon the closing of this offering, based on the number of shares of common stock outstanding as of May 13, 2015, our executive officers, directors and stockholders who owned more than 5% of our outstanding common stock before this offering and their respective affiliates will, in the aggregate, hold shares representing approximately % of our outstanding voting stock. As a result, if these stockholders were to choose to act together, they would be able to control or significantly influence all

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matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would control or significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership control may:

- delay, defer or prevent a change in control;
- entrench our management and the board of directors; or
- impede a merger, consolidation, takeover or other business combination involving us that other stockholders may desire.

If you purchase shares of common stock in this offering, you will suffer immediate dilution of your investment.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. To the extent shares subsequently are issued under outstanding options or warrants, you will incur further dilution. Based on an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$ per share as of March 31, 2015, representing the difference between our pro forma as adjusted net tangible book value per share, which gives effect to this offering, and the initial public offering price. In addition, purchasers of common stock in this offering will have contributed approximately % of the aggregate price paid by all purchasers of our stock but will own only approximately % of our common stock outstanding after this offering.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. We intend to use the net proceeds of this offering, together with our existing cash, cash equivalents and investments, to advance the clinical development of SER-109 for the prevention of further recurrences of CDI in patients suffering from recurrent CDI; to advance the development of our other product candidates, SER-262, SER-287 and SER-155; and the remainder, if any, to fund current and future research and development activities and for working capital and other general corporate purposes. However, our use of these proceeds may differ substantially from our current plans. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

A significant portion of our total outstanding shares are eligible to be sold into the market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. After this offering, we will have outstanding shares of common stock based on the number of shares outstanding as of May 13, 2015. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates or existing stockholders. The

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remaining shares are currently restricted as a result of securities laws or lock-up agreements but will become eligible to be sold 180 days after the date of this offering, unless held by one of our affiliates, in which case the resale of those securities will be subject to volume limitations under Rule 144 of the Securities Act. Moreover, after this offering, holders of an aggregate of 22,959,114 shares of our common stock, including shares issuable upon the exercise of warrants, will have rights, subject to specified conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders, until such shares can otherwise be sold without restriction under Rule 144 or until the rights terminate pursuant to the terms of the investors' rights agreement between us and such holders. We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus.

We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and may remain an emerging growth company until the last day of the fiscal year following the fifth anniversary of the closing of this offering. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.0 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure in this prospectus;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We have taken advantage of reduced reporting burdens in this prospectus. In particular, in this prospectus, we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be reduced or more volatile. In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of these accounting standards until they would otherwise apply to private companies. We have irrevocably

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elect not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, and particularly after we are no longer an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors.

We are evaluating these rules and regulations, and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we will be required to furnish a report by our management on our internal control over financial reporting. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by securities and industry analysts. If no or few securities or industry analysts commence coverage of us, the trading price for our stock would be negatively impacted. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our

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stock performance, or if our target animal studies and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Provisions in our restated certificate of incorporation and amended and restated bylaws and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our restated certificate of incorporation and our amended and restated bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of our company that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions include those establishing:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from filling vacancies on our board of directors;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the ability of our board of directors to alter our bylaws without obtaining stockholder approval;
- the required approval of the holders of at least two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our bylaws or repeal the provisions of our restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors, the chief executive officer, the president or the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period

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of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. Furthermore, our restated certificate of incorporation that will become effective upon the closing of this offering specifies that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for most legal actions involving actions brought against us by stockholders. We believe this provision benefits us by providing increased consistency in the application of Delaware law by chancellors particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, the provision may have the effect of discouraging lawsuits against our directors and officers. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our restated certificate of incorporation to be inapplicable or unenforceable in such action.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, our loan and security agreement with Comerica Bank currently prohibits us from paying dividends on our equity securities, and any future debt agreements may likewise preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biopharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy, prospective products, product approvals, research and development costs, timing and likelihood of success, plans and objectives of management for future operations and future results of anticipated products, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this prospectus are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described under the sections in this prospectus titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this prospectus. These forward-looking statements are subject to numerous risks, including, without limitation, the following:

- our status as a development-stage company and our expectation to incur losses in the future;
- our future capital needs and our need to raise additional funds;
- our ability to build a pipeline of product candidates and develop and commercialize drugs;
- our unproven approach to therapeutic intervention;
- our ability to enroll patients in clinical trials, timely and successfully complete those trials and receive necessary regulatory approvals;
- our ability to establish our own manufacturing facilities and to receive or manufacture sufficient quantities of our product candidates;
- our ability to protect and enforce our intellectual property rights;
- federal, state, and foreign regulatory requirements, including FDA regulation of our product candidates;
- our ability to obtain and retain key executives and attract and retain qualified personnel; and
- our ability to successfully manage our growth.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement relating to this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

INDUSTRY AND OTHER DATA

We obtained the industry, market and competitive position data in this prospectus from our own internal estimates and research as well as from industry and general publications and research, surveys and studies conducted by third parties. Industry publications, studies and surveys generally state that they have been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we are not aware of any misstatements regarding the market or industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk Factors,” “Special Note Regarding Forward-Looking Statements” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this prospectus.

TRADEMARKS, SERVICE MARKS AND TRADENAMES

We own or have rights to use a number of registered and common law trademarks, service marks and/or trade names in connection with our business in the United States and/or in certain foreign jurisdictions, including, but not limited to, “Ecobiotic”.

Solely for convenience, the trademarks, service marks, logos and trade names referred to in this prospectus are without the ® and ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors to these trademarks, service marks and trade names. This prospectus contains additional trademarks, service marks and trade names of others, which are the property of their respective owners. All trademarks, service marks and trade names appearing in this prospectus are, to our knowledge, the property of their respective owners. We do not intend our use or display of other companies’ trademarks, service marks, copyrights or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of shares of our common stock in this offering will be approximately \$ million, or \$ million if the underwriters exercise in full their option to purchase additional shares, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease our net proceeds from this offering by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions. An increase or decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease our net proceeds from this offering by approximately \$ million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions.

We currently estimate that we will use the net proceeds from this offering, together with our existing cash, cash equivalents and investments, as follows:

- approximately \$ million to advance the clinical development of SER-109 for the prevention of further recurrences of CDI in patients suffering from recurrent CDI, which we expect will be sufficient to complete our Phase 2 clinical study;
- approximately \$ million to advance the development of our other product candidates, SER-262, SER-287 and SER-155, which we expect will be sufficient to complete pre-clinical studies and, if supported, file an investigational new drug application, for one or more of these product candidates; and
- the remainder, if any, to fund current and future research and development activities and for working capital and other general corporate purposes.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. We may also use a portion of the net proceeds to in-license, acquire, or invest in additional businesses, technologies, products or assets, although currently we have no specific agreements, commitments or understandings in this regard. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering or the amounts that we will actually spend on the uses set forth above. Predicting the cost necessary to develop product candidates can be difficult and we anticipate that we will need additional funds to complete the development of SER-262, SER-287, SER-155 and any other product candidates we identify. The amounts and timing of our actual expenditures and the extent of clinical development may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from pre-clinical studies and any ongoing clinical trials or clinical trials we may commence in the future, as well as any collaborations that we may enter into with third parties for our product candidates and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid dividends on our capital stock. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. We do not anticipate paying any dividends on our capital stock in the foreseeable future. In addition, the terms of our existing loan and security agreement with Comerica Bank preclude us from paying cash dividends without Comerica's consent.

CAPITALIZATION

The following table sets forth our cash, cash equivalents and investments and our capitalization as of March 31, 2015:

• on an actual basis;

• on a pro forma basis, after giving effect to:

• the automatic conversion of all shares of our preferred stock outstanding at March 31, 2015 into an aggregate of 22,866,987 shares of our common stock in connection with this offering;

• the exercise for cash of an outstanding warrant to purchase 454,545 shares of common stock at an exercise price of \$0.01 per share, which occurred on April 29, 2015;

• the outstanding warrant to purchase our Series A-2 preferred stock becoming a warrant to purchase our common stock in connection with this offering; and

• the filing and effectiveness of our restated certificate of incorporation; and

• on a pro forma as adjusted basis, after giving effect to the pro forma adjustments listed above as well as the sale by us of shares of our common stock in this offering at an assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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Our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with our consolidated financial statements and related notes appearing at the end of this prospectus and the sections of this prospectus titled "Selected Consolidated Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Description of Capital Stock."

	As of March 31, 2015		
	Actual	Pro Forma	Pro Forma As Adjusted ⁽¹⁾
	(in thousands, except share data)		
Cash, cash equivalents and investments	<u>\$104,316</u>	<u>\$ 104,316</u>	<u>\$</u>
Preferred stock warrant liability	\$ 1,369	\$ —	\$
Long-term debt, net of discount, including current portion	2,216	2,216	
Convertible preferred stock (Series A, A-2, B, C, D and D-1), \$0.001 par value; 24,348,003 shares authorized, 22,866,987 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	136,053	—	
Stockholders' equity (deficit):			
Preferred stock, \$0.001 par value; no shares authorized, issued or outstanding, actual; 10,000,000 shares authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	
Common stock, \$0.001 par value; 38,000,000 shares authorized, 7,081,970 shares issued and outstanding, actual; 200,000,000 shares authorized, 30,403,502 shares issued and outstanding, pro forma; 200,000,000 shares authorized, shares issued and outstanding, pro forma as adjusted	7	30	
Additional paid-in capital	2,520	139,919	
Accumulated other comprehensive income	31	31	
Accumulated deficit	(35,803)	(35,803)	
Total stockholders' equity (deficit)	(33,245)	104,177	
Total capitalization	<u>\$106,393</u>	<u>\$ 106,393</u>	<u>\$</u>

(1) A \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash, cash equivalents and investments, additional paid-in capital, total stockholders' equity and total capitalization by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions. An increase or decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash, cash equivalents and investments, additional paid-in capital, total stockholders' equity and total capitalization by approximately \$ million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions.

The number of shares of common stock shown as outstanding in the table above excludes:

- 3,989,246 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2015, at a weighted average exercise price of \$3.63 per share;
- 100,000 shares of common stock available for future issuance under our 2012 Stock Incentive Plan as of March 31, 2015;

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- 92,127 shares of common stock issuable upon the exercise of a warrant to purchase Series A-2 preferred stock that will become a warrant to purchase common stock, at an exercise price of \$1.78 per share, in connection with this offering;
- shares of common stock issuable upon the exercise of stock options to be granted in connection with this offering under our 2015 Incentive Plan to some of our directors, executive officers and employees, at an exercise price per share equal to the public offering price in this offering;
- additional shares of our common stock that will become available for future issuance under our 2015 Incentive Plan as well as shares of our common stock that become available pursuant to provisions in our 2015 Incentive Plan that automatically increase the share reserve under our 2015 Incentive Plan as described in “Executive and Director Compensation—Incentive Plans—2015 Incentive Award Plan”; and
- additional shares of our common stock that will become available for future issuance under our 2015 ESPP as well as shares of our common stock that become available pursuant to provisions in our 2015 ESPP that automatically increase the share reserve under our 2015 ESPP as described in “Executive and Director Compensation—Incentive Plans—2015 Employee Stock Purchase Plan.”

Mayo Warrants

On June 6, 2014, we issued two warrants to the Mayo Foundation for Medical Education and Research, or the Mayo Foundation, in connection with our research and option agreement with the Mayo Foundation. The first warrant, or the funding warrant, for the purchase of 454,545 shares of our common stock at an exercise price of \$0.01 per share was exercised in full on April 29, 2015. The second warrant is an incentive warrant tied to certain milestones that, as of May 13, 2015, had not been accomplished. The incentive warrant will terminate upon the closing of this offering.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value (deficit) as of March 31, 2015 was \$(35.3) million, or \$(4.99) per share of common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our total liabilities and preferred stock, which is not included within stockholders' equity (deficit). Historical net tangible book value per share is our historical net tangible book value (deficit) divided by the number of shares of common stock outstanding as of March 31, 2015.

Our pro forma net tangible book value as of March 31, 2015 was \$102.1 million, or \$3.36 per share of common stock. Pro forma net tangible book value represents the amount of our total tangible assets less total liabilities, after giving effect to (1) the automatic conversion of all shares of our preferred stock outstanding as of March 31, 2015 into an aggregate of 22,866,987 shares of our common stock in connection with this offering, (2) the exercise for cash of a warrant to purchase 454,545 shares of common stock at an exercise price of \$0.01 per share, which occurred on April 29, 2015, and (3) the outstanding warrant to purchase our Series A-2 preferred stock becoming a warrant to purchase our common stock in connection with this offering. Pro forma net tangible book value per share represents our pro forma net tangible book value divided by the total number of shares outstanding as of March 31, 2015, after giving effect to the pro forma adjustments described in (1) and (2) above.

After giving effect to our sale of _____ shares of common stock in this offering at an assumed initial public offering price of \$ _____ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2015 would have been approximately \$ _____ million, or \$ _____ per share. This represents an immediate increase in pro forma as adjusted net tangible book value of \$ _____ per share to existing stockholders and an immediate dilution of \$ _____ per share to new investors purchasing common stock in this offering at the initial public offering price. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Historical net tangible book value (deficit) per share as of March 31, 2015	\$(4.99)
Increase per share attributable to the conversion of all shares of preferred stock outstanding and a warrant to purchase preferred stock becoming a warrant to purchase common stock in connection with this offering	8.35
Pro forma net tangible book value per share as of March 31, 2015	3.36
Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing shares in this offering	<u> </u>
Pro forma as adjusted net tangible book value per share after this offering	<u> </u>
Dilution per share to new investors purchasing shares in this offering	<u> </u> \$

A \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease our pro forma as adjusted net tangible book value by \$ _____ million, our pro forma as adjusted net

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tangible book value per share after this offering by approximately \$ [redacted] and dilution per share to new investors purchasing shares in this offering by approximately \$ [redacted], assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions. An increase of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase the pro forma as adjusted net tangible book value per share after this offering by approximately \$ [redacted] and decrease the dilution per share to new investors participating in this offering by approximately \$ [redacted], assuming no change in the assumed initial public offering price and after deducting the estimated underwriting discounts and commissions. A decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by approximately \$ [redacted] and increase the dilution per share to new investors participating in this offering by approximately \$ [redacted], assuming no change in the assumed initial public offering price and after deducting the estimated underwriting discounts and commissions.

If the underwriters exercise their option to purchase additional shares in full, our pro forma as adjusted net tangible book value per share after this offering would be \$ [redacted] per share, representing an immediate increase in pro forma as adjusted net tangible book value per share of \$ [redacted] to existing stockholders and immediate dilution of \$ [redacted] in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering, assuming an initial public offering price of \$ [redacted] per share, the midpoint of the price range set forth on the cover page of this prospectus.

The following table summarizes, on a pro forma as adjusted basis described above, the number of shares of our common stock, the total consideration and the average price per share (i) paid to us by existing stockholders and (ii) to be paid by new investors purchasing shares of common stock in this offering at an assumed initial public offering price of \$ [redacted] per share, the midpoint of the price range set forth on the cover page of this prospectus, before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders		%	\$	%	\$
New investors					\$
Total		100.0%	\$	100.0%	

A \$1.00 increase or decrease in the assumed initial public offering price of \$ [redacted] per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by approximately \$ [redacted] million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by [redacted] percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by [redacted] percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. An increase or decrease of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by approximately \$ [redacted] million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by [redacted] percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by [redacted] percentage points, assuming no change in the assumed initial public offering price.

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The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase additional shares is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors participating in the offering would be increased to % of the total number of shares of our common stock outstanding after this offering.

The above discussion and tables exclude:

- 3,989,246 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2015, at a weighted average exercise price of \$3.63 per share;
- 100,000 shares of common stock available for future issuance under our 2012 Stock Incentive Plan as of March 31, 2015;
- 92,127 shares of common stock issuable upon the exercise of a warrant to purchase Series A-2 preferred stock that will become a warrant to purchase common stock, at an exercise price of \$1.78 per share, in connection with this offering;
- shares of common stock issuable upon the exercise of stock options to be granted in connection with this offering under our 2015 Incentive Plan to some of our directors, executive officers and employees, at an exercise price per share equal to the public offering price in this offering;
- additional shares of our common stock that will become available for future issuance under our 2015 Incentive Plan as well as shares of our common stock that become available pursuant to provisions in our 2015 Incentive Plan that automatically increase the share reserve under our 2015 Incentive Plan as described in "Executive and Director Compensation—Incentive Plans—2015 Incentive Award Plan"; and
- additional shares of our common stock that will become available for future issuance under our 2015 ESPP as well as shares of our common stock that become available pursuant to provisions in our 2015 ESPP that automatically increase the share reserve under our 2015 ESPP as described in "Executive and Director Compensation—Incentive Plans—2015 Employee Stock Purchase Plan."

To the extent that outstanding options are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities may result in further dilution to our stockholders.

SELECTED CONSOLIDATED FINANCIAL DATA

You should read the following selected consolidated financial data together with our consolidated financial statements and the related notes appearing at the end of this prospectus and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of this prospectus. We have derived the consolidated statement of operations data for the years ended December 31, 2012, 2013 and 2014 and the consolidated balance sheet data as of December 31, 2013 and 2014 from our audited consolidated financial statements appearing at the end of this prospectus. We have derived the consolidated balance sheet data as of December 31, 2012 from our audited consolidated financial statements not included in this prospectus. The consolidated statement of operations data for the three months ended March 31, 2014 and 2015 and the consolidated balance sheet data as of March 31, 2015 have been derived from our unaudited consolidated financial statements appearing at the end of this prospectus and have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information in those statements. Our historical results are not necessarily indicative of the results that should be expected in the future, and results for the three months ended March 31, 2015 are not necessarily indicative of the results to be expected for the full year ending December 31, 2015.

	Year Ended December 31,			Three Months Ended March 31,	
	2012	2013	2014	2014	2015
(in thousands, except per share data)					
Consolidated Statement of Operations Data:					
Revenue	\$ —	\$ —	\$ —	\$ —	\$ —
Operating expenses:					
Research and development	2,077	4,805	10,718	1,032	5,561
General and administrative	956	1,247	4,364	640	2,606
Total operating expenses	<u>3,033</u>	<u>6,052</u>	<u>15,082</u>	<u>1,672</u>	<u>8,167</u>
Loss from operations	<u>(3,033)</u>	<u>(6,052)</u>	<u>(15,082)</u>	<u>(1,672)</u>	<u>(8,167)</u>
Other income (expense):					
Interest income (expense), net	(93)	(42)	(209)	(37)	(17)
Revaluation of preferred stock warrant liability	—	(8)	(1,418)	20	213
Total other income (expense), net	<u>(93)</u>	<u>(50)</u>	<u>(1,627)</u>	<u>(17)</u>	<u>196</u>
Net loss	<u>(3,126)</u>	<u>(6,102)</u>	<u>(16,709)</u>	<u>(1,689)</u>	<u>(7,971)</u>
Accretion of convertible preferred stock to redemption value	<u>(276)</u>	<u>(875)</u>	<u>(1,291)</u>	<u>(233)</u>	<u>—</u>
Net loss attributable to common stockholders	<u><u>\$ (3,402)</u></u>	<u><u>\$ (6,977)</u></u>	<u><u>\$ (18,000)</u></u>	<u><u>\$ (1,922)</u></u>	<u><u>\$ (7,971)</u></u>
Net loss per share attributable to common stockholders, basic and diluted ⁽¹⁾	<u><u>\$ (0.59)</u></u>	<u><u>\$ (1.09)</u></u>	<u><u>\$ (2.67)</u></u>	<u><u>\$ (0.29)</u></u>	<u><u>\$ (1.15)</u></u>
Weighted average common shares outstanding, basic and diluted ⁽¹⁾	<u><u>5,725</u></u>	<u><u>6,395</u></u>	<u><u>6,748</u></u>	<u><u>6,686</u></u>	<u><u>6,913</u></u>
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited) ⁽²⁾			<u><u>\$ (0.74)</u></u>		<u><u>\$ (0.27)</u></u>
Pro forma weighted average common shares outstanding, basic and diluted (unaudited) ⁽²⁾			<u><u>20,684</u></u>		<u><u>29,780</u></u>

(1) See Note 11 to our consolidated financial statements appearing at the end of this prospectus for further details on the calculation of basic and diluted net loss per share attributable to common stockholders.

(2) See Note 12 to our consolidated financial statements appearing at the end of this prospectus for further details on the calculation of basic and diluted pro forma net loss per share attributable to common stockholders.

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	As of December 31,			As of
	2012	2013	2014	March 31, 2015
	(in thousands)			
Consolidated Balance Sheet Data:				
Cash, cash equivalents and investments	\$ 6,215	\$ 1,654	\$114,185	\$104,316
Working capital ⁽¹⁾	6,067	649	109,140	101,649
Total assets	6,538	2,125	117,345	108,628
Preferred stock warrant liability	—	164	1,582	1,369
Long-term debt, net of discount, including current portion	—	838	2,504	2,216
Convertible preferred stock	10,708	11,583	136,077	136,053
Total stockholders' deficit	(4,348)	(11,116)	(26,721)	(33,245)

(1) We define working capital as current assets less current liabilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of financial condition and results of operations together with the section titled "Selected Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the "Risk Factors" section of this prospectus.

Overview

We are a microbiome therapeutics platform company developing a novel class of biological drugs, which are designed to treat disease by restoring the function of a dysbiotic microbiome. Our lead product candidate, SER-109, is designed to prevent further recurrences of *Clostridium difficile* infection, or CDI, a debilitating infection of the colon, by treating the dysbiosis of the colonic microbiome and, if approved by the FDA, could be a first-in-field drug. Using our microbiome therapeutics platform, we are developing additional product candidates, including SER-262 to prevent an initial recurrence of primary CDI, SER-287 to treat inflammatory bowel disease, or IBD, including ulcerative colitis and SER-155 to treat enteric pathogens, such as antibiotic-resistant bacteria. We are also conducting research on metabolic diseases, such as early-stage, non-insulin dependent diabetes; other inflammatory diseases, such as Crohn's disease; and infections related to antibiotic use, cancer chemotherapy and immune suppression.

Since our inception in October 2010, we have devoted substantially all of our resources to developing SER-109, researching SER-262 and SER-287, building our intellectual property portfolio, developing our supply chain, business planning, raising capital and providing general and administrative support for these operations. From our inception through March 31, 2015, we have financed our operations through private placements of our convertible preferred stock, the issuance of convertible promissory notes and borrowings under a loan and security agreement, as amended, with Comerica Bank, or the loan and security agreement. Through March 31, 2015, we had received gross proceeds of \$137.0 million from such transactions and we had repaid \$0.7 million of the total \$3.0 million borrowed under the loan and security agreement.

We are a development stage company and have not generated any revenue. All of our product candidates other than SER-109 are still in pre-clinical development. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more of our product candidates. Since our inception, we have incurred significant operating losses. Our net loss was \$3.1 million for the year ended December 31, 2012, \$6.1 million for the year ended December 31, 2013, \$16.7 million for the year ended December 31, 2014 and \$1.7 million and \$8.0 million for the three months ended March 31, 2014 and 2015, respectively. As of March 31, 2015, we had an accumulated deficit of \$35.8 million.

We expect that our expenses will increase substantially in connection with our ongoing activities, particularly as we:

- advance the clinical development of SER-109 for the prevention of further recurrences of CDI in patients suffering from recurrent CDI, through a Phase 2 clinical study;
- initiate clinical development of SER-262 to be used following antibiotic treatment of primary CDI to prevent an initial recurrence of CDI;

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- initiate Phase 1 clinical development of SER-287 for the treatment of IBD, including ulcerative colitis;
- conduct research and continue pre-clinical development of additional Ecobiotic microbiome therapeutics, including SER-155 for the treatment of antibiotic-resistant bacteria;
- make strategic investments in manufacturing capabilities, including potentially planning and building a small-scale commercial manufacturing facility;
- maintain our current intellectual property portfolio and opportunistically acquire complementary intellectual property; and
- seek to obtain regulatory approvals for our product candidates.

In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company.

As a result, we will need additional financing to support our continuing operations. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of public or private equity or debt financings or other sources, which may include collaborations with third parties. Adequate additional financing may not be available to us on acceptable terms, or at all. Our inability to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenue to achieve profitability, and we may never do so.

We expect that our existing cash, cash equivalents and investments, together with anticipated net proceeds from this offering, will enable us to fund our operating expenses and capital expenditure requirements through at least . See “—Liquidity and Capital Resources.”

Financial Operations Overview

Revenue

We have not generated any revenue since our inception and do not expect to generate any revenue from the sale of products in the near future.

Operating Expenses

Our operating expenses since inception have consisted primarily of research and development activities and general and administrative costs.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our discovery efforts, and the development of our product candidates, which include:

- expenses incurred under agreements with third parties, including contract research organizations, or CROs, that conduct research, pre-clinical activities and clinical trials on our behalf as well as contract manufacturing organizations, or CMOs, that manufacture drug products for use in our pre-clinical and clinical trials;
- salaries, benefits and other related costs, including stock-based compensation expense, for personnel in our research and development functions;
- costs of outside consultants, including their fees, stock-based compensation and related travel expenses;

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- the cost of laboratory supplies and acquiring, developing and manufacturing pre-clinical study and clinical trial materials;
- costs related to compliance with regulatory requirements; and
- facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

We expense research and development costs as incurred. We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our vendors and our clinical investigative sites. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in our financial statements as prepaid or accrued research and development expenses.

Our primary focus of research and development since inception has been on our microbiome therapeutics platform and the subsequent development of SER-109 and SER-262. Our direct research and development expenses are tracked on a program-by-program basis and consist primarily of external costs, such as fees paid to investigators, consultants and CROs in connection with our pre-clinical studies and clinical trials and regulatory fees. We do not allocate employee-related costs and other indirect costs to specific research and development programs because these costs are deployed across multiple product programs under development and, as such, are classified as costs of our microbiome therapeutics platform research, along with external costs directly related to our microbiome therapeutics platform.

The table below summarizes our research and development expenses incurred on our platform and by product development program.

	Year Ended December 31,			Three Months Ended	
	2012	2013	2014	March 31,	2015
			(in thousands)		
Microbiome therapeutics platform	\$2,077	\$3,424	\$ 7,584	\$ 877	\$2,314
SER-109	—	729	3,122	143	3,185
SER-262	—	652	12	12	62
Total research and development expenses	<u>\$2,077</u>	<u>\$4,805</u>	<u>\$10,718</u>	<u>\$ 1,032</u>	<u>\$5,561</u>

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will continue to increase in the foreseeable future as we initiate clinical trials for certain product candidates, including SER-262 and SER-287, continue to discover and develop additional product candidates, including SER-155, and pursue later stages of clinical development of our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in our executive, finance, corporate and business development and administrative functions. General and administrative expenses also include legal fees relating to patent and corporate matters; professional fees for accounting, auditing, tax and consulting services; insurance costs; travel expenses; and facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

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We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support the expected growth in our research and development activities and the potential commercialization of our product candidates. We also expect to incur increased expenses associated with being a public company, including increased costs of accounting, audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance costs and investor and public relations costs.

Other Income (Expense), Net

Interest Income (Expense), Net. Interest income (expense), net consists of interest earned on our cash, cash equivalents and investments as well as interest expense incurred on our debt. During the years ended December 31, 2013 and 2014 and the three months ended March 31, 2014 and 2015, interest expense consisted of interest at the stated rate on borrowings under our loan and security agreement, amortization of deferred financing costs and interest expense related to the accretion of debt discount associated with (1) the fair value of preferred stock warrant we issued in connection with the loan and security agreement and (2) a final payment due at maturity. In 2012, interest expense consisted of interest on our outstanding convertible promissory notes at the stated interest rate and interest expense related to the amortization of deferred financing costs. In June 2012, all of our outstanding convertible promissory notes and accrued interest were converted into shares of our Series A convertible preferred stock.

Revaluation of Preferred Stock Warrant Liability. Revaluation of preferred stock warrant liability consists of the net gain or loss associated with the change in the fair value of our preferred stock warrant liability. We have issued a warrant for the purchase of our Series A-2 convertible preferred stock that we believe is a financial instrument that may require a transfer of assets because of the redemption feature of the underlying stock. Therefore, we have classified this warrant as a liability that we remeasure to fair value at each reporting period, and we record the changes in the fair value as a component of other income (expense), net. In connection with this offering, the underlying convertible preferred stock will be converted into common stock, the preferred stock warrant will become exercisable for common stock instead of preferred stock and the fair value of the warrant liability at that time will be reclassified to additional paid-in capital.

Income Taxes

Since our inception in 2010, we have not recorded any U.S. federal or state income tax benefits for the net losses we have incurred in each year or our earned research and development tax credits, due to our uncertainty of realizing a benefit from those items. As of December 31, 2014, we had federal and state net operating loss carryforwards of \$20.3 million and \$19.9 million, respectively, both of which begin to expire in 2031. As of December 31, 2014, we also had federal and state research and development tax credit carryforwards of \$0.8 million and \$0.4 million, respectively, which begin to expire in 2031 and 2026, respectively.

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles, or GAAP, in the United States of America. The preparation of our consolidated financial statements and related disclosures requires us to make estimates and assumptions that affect the reported amount of assets, liabilities, revenue, costs and expenses and related disclosures. We believe that the estimates and assumptions involved in the accounting policies described below may have the greatest potential impact on our consolidated financial statements and, therefore, consider these to be our critical accounting policies. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions and conditions.

Accrued Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated costs incurred for the services when we have not yet been invoiced or otherwise notified of the actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advanced payments. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. Examples of estimated accrued research and development expenses include fees paid to:

- CROs in connection with performing research services on our behalf and clinical trials;
- investigative sites or other providers in connection with clinical trials;
- vendors in connection with pre-clinical and clinical development activities; and
- vendors related to product manufacturing, development and distribution of pre-clinical and clinical supplies.

We base our expenses related to pre-clinical studies and clinical trials on our estimates of the services received and efforts expended pursuant to quotes and contracts with multiple CROs that conduct and manage clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the clinical expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed, enrollment of patients, number of sites activated and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or amount of prepaid expense accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in us reporting amounts that are too high or too low in any particular period. To date, we have not made any material adjustments to our prior estimates of accrued research and development expenses.

Stock-Based Compensation

We measure stock options and other stock-based awards granted to employees and directors based on the fair value on the date of grant and recognize the corresponding compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Generally, we issue stock options and restricted stock awards with only service-based vesting conditions and record the expense for these awards using the straight-line method.

We measure stock-based awards granted to consultants and non-employees based on the fair value of the award on the date at which the related service is complete. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of our common stock and updated assumption inputs in the Black-Scholes option-pricing model.

We estimate the fair value of each stock option grant using the Black-Scholes option-pricing model. Use of this model requires that we make assumptions as to the volatility of our common stock,

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the expected term of our stock options, the risk-free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield. Because we are currently a private company and lack company-specific historical and implied volatility information, we estimate our expected volatility based on the historical volatility of a group of publicly traded peer companies. We expect to continue to do so until such time as we have adequate historical data regarding the volatility of our traded stock price. We use the simplified method prescribed by Securities and Exchange Commission Staff Accounting Bulletin No. 107, *Share-Based Payment*, to calculate the expected term of options granted to employees and directors. We base the expected term of options granted to consultants and non-employees on the contractual term of the options. We determine the risk-free interest rate by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that we have never paid cash dividends and do not expect to pay any cash dividends in the foreseeable future.

The assumptions we used to determine the fair value of stock options granted to employees and directors are as follows, presented on a weighted average basis:

	Year Ended December 31,			Three Months Ended
	2012	2013	2014	March 31, 2015
Risk-free interest rate	0.92%	1.27%	1.83%	1.57%
Expected term (in years)	6.0	6.0	6.0	6.0
Expected volatility	109.4%	85.9%	83.5%	76.0%
Expected dividend yield	0%	0%	0%	0%

These assumptions represented our best estimates, but the estimates involve inherent uncertainties and the application of our judgment.

We did not grant any stock options to employees or directors during the three months ended March 31, 2014.

We recognize compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate for pre-vesting forfeitures, we have considered our historical experience of actual forfeitures.

The following table summarizes the classification of our stock-based compensation expenses recognized in our consolidated statements of operations:

	Year Ended December 31,			Three Months Ended	
	2012	2013	2014	2014	2015
	(in thousands)				
Research and development	\$ 26	\$ 177	\$1,068	\$ 32	\$ 623
General and administrative	2	32	1,000	13	704
	<u>\$ 28</u>	<u>\$ 209</u>	<u>\$2,068</u>	<u>\$ 45</u>	<u>\$ 1,327</u>

Determination of the Fair Value of Common Stock

We are a privately held company with no active public market of our common stock. Therefore, our board of directors has estimated the fair value of our common stock at various dates, with input from management, considering our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant.

In the absence of a public trading market for our common stock, our determination of the fair value of our common stock was performed using methodologies, approaches and assumptions

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consistent with the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. We performed these contemporaneous valuations, with the assistance of a third-party specialist, at various dates, which resulted in valuations of our common stock of \$0.48 per share as of April 1, 2013, \$0.71 per share as of May 23, 2014, \$3.14 per share as of October 1, 2014, \$7.79 per share as of November 17, 2014 and \$15.77 per share as of February 18, 2015. In addition to these valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, including:

- the prices at which we sold shares of preferred stock and the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- the progress of our research and development programs, including the status of pre-clinical studies and clinical trials for our product candidates;
- our stage of development and commercialization and our business strategy;
- external market conditions affecting the biotechnology industry;
- trends within the biotechnology industry;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our preferred stock;
- the likelihood of achieving a liquidity event, such as an initial public offering, or IPO, or sale of our company in light of prevailing market conditions; and
- the analysis of IPOs and the market performance of similar companies in the biopharmaceutical industry.

There are significant judgments and estimates inherent in these valuations. These judgments and estimates include assumptions regarding our future operating performance, the stage of development of our product candidates, the timing of a potential IPO or other liquidity event and the determination of the appropriate valuation methodology at each valuation date. If we had made different assumptions, our stock-based compensation expense, net loss attributable to common stockholders and net loss per share attributable to common stockholders could have been significantly different.

Once a public trading market for our common stock has been established in connection with the closing of this offering, it will no longer be necessary for our board of directors to estimate the fair value of our common stock in connection with our accounting for granted stock options and restricted stock, as the fair value of our common stock will be its trading price on The NASDAQ Global Market.

Valuation Methodologies

Our common stock valuations were performed using the option-pricing method, or OPM, or a hybrid of the probability-weighted expected return method, or PWERM, and the OPM, which we refer to as the hybrid method. The method selected was based on availability and the quality of information to develop the assumptions for the methodology.

OPM. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceed the value of the liquidation preferences at the time of a liquidity event, such as a strategic sale or merger. The common stock is modeled as a call option on the underlying equity value at a predetermined exercise price. In the model, the exercise price is based on a comparison with the total equity value rather than, as in the

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case of a regular call option, a comparison with a per share stock price. Thus, common stock is considered to be a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after the preferred stock liquidation preference is paid.

The OPM uses the Black-Scholes option-pricing model to price the call options. This model defines the fair values of securities as functions of the current fair value of a company and uses assumptions such as the anticipated timing of a potential liquidity event and the estimated volatility of the equity securities.

PWERM. Under the PWERM methodology, the fair value of common stock is estimated based upon an analysis of future values for the company, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock.

Hybrid Method. The hybrid method is a PWERM where the equity value in one of the scenarios is calculated using an OPM. In the hybrid method used by us, two types of future-event scenarios were considered: an IPO and a remaining private scenario. The enterprise value for the IPO scenario was determined using a market approach. The enterprise value for the remaining private scenario was determined using the OPM backsolve approach. The relative probability of each type of future-event scenario was determined by our board of directors based on an analysis of market conditions at the time, including then-current IPO valuations of similarly situated companies, and expectations as to the timing and likely prospects of the future-event scenarios.

Option Grants

The following table summarizes by grant date the number of shares subject to options granted since January 1, 2013, the per share exercise price of the options, the fair value of common stock underlying the options on date of grant and the per share estimated fair value of the options:

Grant Date	Number of Shares Subject to Options Granted	Per Share Exercise Price of Options⁽¹⁾	Fair Value of Common Stock per Share on Date of Option Grant	Per Share Estimated Fair Value of Options⁽²⁾⁽³⁾
May 17, 2013	700,000	\$ 0.48	\$ 0.48	\$ 0.35
November 6, 2013	299,000	\$ 0.48	\$ 0.48	\$ 0.34
August 7, 2014	1,775,751	\$ 0.71	\$ 4.32 ⁽⁴⁾	\$ 3.92
August 21, 2014	59,500	\$ 0.71	\$ 4.32 ⁽⁴⁾	\$ 3.92
October 7, 2014	206,500	\$ 3.14	\$ 6.70 ⁽⁵⁾	\$ 5.42
December 9, 2014	320,192	\$ 7.79	\$ 7.79	\$ 5.38
March 25, 2015	606,624	\$ 15.77	\$ 15.77	\$ 10.50
March 30, 2015	5,000	\$ 15.77	\$ 15.77	\$ 10.50
April 2, 2015	25,000	\$ 15.77	\$ 15.77	\$ 10.50

(1) The Per Share Exercise Price of Options represents the fair value of our common stock on the date of grant, as determined by our board of directors, after taking into account our most recently available contemporaneous valuation of our common stock as well as additional factors that may have changed since the date of such contemporaneous valuation through the date of grant.

(2) The Per Share Estimated Fair Value of Options reflects the weighted average fair value of options granted on each grant date, determined using the Black-Scholes option-pricing model.

(3) For purposes of recording stock-based compensation for grants of options to non-employees, we measure the fair value of the award on the service completion date (vesting date). At the end of each reporting period prior to completion of the services, we remeasure the value of any unvested portion of the option based on the then-current fair value of the option

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and adjust the expense accordingly. The weighted average fair value amounts presented in this column for grants to employees, directors and non-employees reflect only the grant-date fair value of options granted to non-employees and not any subsequently remeasured fair value of those options.

- (4) At the time of the option grants on August 7, 2014 and August 21, 2014, our board of directors determined that the fair value of our common stock of \$0.71 per share calculated in the contemporaneous valuation as of May 23, 2014 reasonably reflected the per share fair value of common stock as of the grant date. However, as described below, the fair value of common stock at the date of these grants was subsequently adjusted to \$4.32 per share in connection with a retrospective fair value assessment for accounting purposes.
- (5) At the time of the option grants on October 7, 2014, our board of directors determined that the fair value of our common stock of \$3.14 per share calculated in the contemporaneous valuation as of October 1, 2014 reasonably reflected the per share fair value of common stock as of the grant date. However, as described below, the fair value of common stock at the date of these grants was subsequently adjusted to \$6.70 per share in connection with a retrospective fair value assessment for accounting purposes.

In the course of preparing for this offering, in November 2014, we performed a retrospective fair value assessment and concluded that the fair value of our common stock underlying stock options we granted during August 2014, with an exercise price of \$0.71 per share, was \$4.32 per share for accounting purposes and that the fair value of our common stock underlying stock options we granted on October 7, 2014, with an exercise price of \$3.14 per share, was \$6.70 per share for accounting purposes. The values of \$4.32 per share and \$6.70 per share, which we applied to determine the fair values of the August 2014 and October 2014 options for accounting purposes and to determine related stock-based compensation expense, were based in part upon a valuation of our common stock as of August 7, 2014, performed on a retrospective basis with the assistance of a third-party specialist, and upon a revised valuation of our common stock as of October 1, 2014, performed on a retrospective basis with the assistance of a third-party specialist, taking into account an increased probability of executing a successful IPO in 2015 and initial feedback from potential investors in our Series C convertible preferred stock offering. These common stock valuations as of August 7, 2014 and October 1, 2014 were performed using the hybrid method.

Valuation of Warrant to Purchase Convertible Preferred Stock

We classify a warrant to purchase shares of our Series A-2 convertible preferred stock as a liability on our balance sheets as this warrant is a free-standing financial instrument that may require us to transfer assets upon exercise. The warrant was initially recorded at fair value on date of grant, and it is subsequently remeasured to fair value at each balance sheet date. Changes in fair value of this warrant are recognized as a component of other income (expense), net in our consolidated statement of operations and comprehensive loss. We will continue to adjust the liability for changes in fair value until the earlier of the exercise or expiration of the warrant.

We use the Black-Scholes option-pricing model, which incorporates assumptions and estimates, to value the preferred stock warrant. We assess these assumptions and estimates on a quarterly basis as additional information impacting the assumptions is obtained. Estimates and assumptions impacting the fair value measurement include the fair value per share of the underlying Series A-2 convertible preferred stock, the remaining contractual term of the warrant, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. We determine the fair value per share of the underlying preferred stock by taking into consideration our most recent sales of our convertible preferred stock, results obtained from third-party valuations and additional factors that we deem relevant. We have historically been a private company and lack company-specific historical and implied volatility information of our stock. Therefore, we estimate expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrant. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrant. We have estimated a 0% dividend yield based on the expected dividend yield and the fact that we have never paid or declared dividends.

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In connection with this offering, the underlying convertible preferred stock will be converted to common stock, the preferred stock warrant will become exercisable for common stock instead of preferred stock and the fair value of the warrant liability at that time will be reclassified to additional paid-in capital.

Emerging Growth Company Status

The Jumpstart Our Business Startups Act of 2012, or the JOBS Act, permits an “emerging growth company” such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have irrevocably elected to “opt out” of this provision and, as a result, we will comply with new or revised accounting standards when they are required to be adopted by public companies that are not emerging growth companies.

Results of Operations**Comparison of Three Months Ended March 31, 2014 and 2015**

The following table summarizes our results of operations for the three months ended March 31, 2014 and 2015:

	Three Months Ended March 31,		Increase (Decrease)
	2014	2015	
	(in thousands)		
Revenue	\$ —	\$ —	\$ —
Operating expenses:			
Research and development	1,032	5,561	4,529
General and administrative	640	2,606	1,966
Total operating expenses	<u>1,672</u>	<u>8,167</u>	<u>6,495</u>
Loss from operations	<u>(1,672)</u>	<u>(8,167)</u>	<u>(6,495)</u>
Other income (expense):			
Interest income (expense), net	(37)	(17)	20
Revaluation of preferred stock warrant liability	20	213	193
Total other income (expense), net	<u>(17)</u>	<u>196</u>	<u>213</u>
Net loss	<u><u>\$(1,689)</u></u>	<u><u>\$(7,971)</u></u>	<u><u>\$ (6,282)</u></u>

Research and Development Expenses

	Three Months Ended March 31,		Increase (Decrease)
	2014	2015	
	(in thousands)		
Microbiome therapeutics platform	\$ 877	\$ 2,314	\$ 1,437
SER-109	143	3,185	3,042
SER-262	12	62	50
Total research and development expenses	<u><u>\$ 1,032</u></u>	<u><u>\$ 5,561</u></u>	<u><u>\$ 4,529</u></u>

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Research and development expenses were \$1.0 million for the three months ended March 31, 2014, compared to \$5.6 million for the three months ended March 31, 2015. The increase of \$4.5 million was due primarily to the following:

- an increase of \$1.4 million in research expenses related to our microbiome therapeutics platform, due primarily to higher payroll and consultant costs of \$1.3 million, which included an increase in stock-based compensation expense of \$0.6 million, due primarily to an increase in employee headcount and, to a lesser extent, an increase in laboratory supply costs and facility-related costs;
- an increase of \$3.0 million in expenses related to our SER-109 program, due primarily to higher clinical trial costs of \$1.7 million, higher bioprocess development costs of \$1.1 million and higher sequencing costs of \$0.2 million; and
- an increase of \$0.1 million in expenses of our SER-262 program in connection with various pre-clinical and development activities related to the program.

We expect that our research and development expenses will continue to increase in the foreseeable future as we initiate clinical trials for certain product candidates, including SER-262 and SER-287, continue to discover and develop additional product candidates, including SER-155, and pursue later stages of clinical development of our product candidates.

General and Administrative Expenses

	Three Months Ended March 31,		Increase (Decrease)
	2014	2015	
	(in thousands)		
Personnel related (including stock-based compensation)	\$ 149	\$ 1,400	\$ 1,251
Professional fees	438	827	389
Facility-related and other	53	379	326
Total general and administrative expenses	<u>\$ 640</u>	<u>\$ 2,606</u>	<u>\$ 1,966</u>

General and administrative expenses were \$0.6 million for the three months ended March 31, 2014, compared to \$2.6 million for the three months ended March 31, 2015. The increase of \$2.0 million was primarily due to an increase in personnel related costs of \$1.3 million, which included an increase of \$0.7 million in stock-based compensation, an increase in professional fees of \$0.4 million and an increase in facility-related and other costs of \$0.3 million. Personnel related costs increased primarily due to the hiring of eight additional employees from March 31, 2014 to March 31, 2015 to support corporate operations and business development activities, including the hiring of our Chief Executive Officer in June 2014 and our Chief Financial Officer in November 2014. The increase in professional fees was due to an increase in accounting, audit and legal fees as a result of ongoing business activities. The increase in facility-related and other costs was primarily due to an increase in office-related expenses and rent expense resulting from our new facility for research and development that commenced in February 2015.

Other Income (Expense), Net

Other income (expense), net for the three months ended March 31, 2014 was an expense of less than \$0.1 million, compared to income of \$0.2 million for the three months ended March 31, 2015. The \$0.2 million increase in other income, net was primarily due to gains recorded to adjust the fair value of our preferred stock warrant liability due to a decrease in the fair value of the underlying Series A-2 convertible preferred stock over that period.

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Comparison of Years Ended December 31, 2013 and 2014

The following table summarizes our results of operations for the years ended December 31, 2013 and 2014:

	Year Ended December 31,		Increase (Decrease)
	2013	2014	
	(in thousands)		
Revenue	\$ —	\$ —	\$ —
Operating expenses:			
Research and development	4,805	10,718	5,913
General and administrative	1,247	4,364	3,117
Total operating expenses	<u>6,052</u>	<u>15,082</u>	<u>9,030</u>
Loss from operations	<u>(6,052)</u>	<u>(15,082)</u>	<u>(9,030)</u>
Other income (expense):			
Interest income (expense), net	(42)	(209)	(167)
Revaluation of preferred stock warrant liability	(8)	(1,418)	(1,410)
Total other income (expense), net	<u>(50)</u>	<u>(1,627)</u>	<u>(1,577)</u>
Net loss	<u>\$ (6,102)</u>	<u>\$ (16,709)</u>	<u>\$ (10,607)</u>

Research and Development Expenses

	Year Ended December 31,		Increase (Decrease)
	2013	2014	
	(in thousands)		
Microbiome therapeutics platform	\$3,424	\$ 7,584	\$ 4,160
SER-109	729	3,122	2,393
SER-262	652	12	(640)
Total research and development expenses	<u>\$4,805</u>	<u>\$10,718</u>	<u>\$ 5,913</u>

Research and development expenses were \$4.8 million for the year ended December 31, 2013, compared to \$10.7 million for the year ended December 31, 2014. The increase of \$5.9 million was due primarily to the following:

- an increase of \$4.2 million in research expenses related to our microbiome therapeutics platform, due primarily to higher payroll and consultant costs of \$2.1 million, which included an increase in stock-based compensation expense of \$0.9 million; an increase in laboratory supply costs of \$0.7 million; an increase in facility-related costs of \$0.5 million; and an increase in licensing costs of \$0.3 million;
- an increase of \$2.4 million in expenses related to our SER-109 program, due primarily to higher clinical trial costs of \$2.1 million and higher contract manufacturing costs of \$0.4 million, partially offset by lower animal studies costs; and
- a decrease of \$0.6 million in expenses of our SER-262 program due to our shifted focus to SER-109 and our microbiome therapeutics platform research. Beginning in 2015, we expect to increase our expenses in connection with our current pre-clinical and planned clinical development activities related to SER-262.

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We expect that our research and development expenses will continue to increase in the foreseeable future as we initiate clinical trials for certain product candidates, including SER-262 and SER-287, continue to discover and develop additional product candidates, including SER-155, and pursue later stages of clinical development of our product candidates.

General and Administrative Expenses

	Year Ended December 31,		Increase (Decrease)
	2013	2014	
	(in thousands)		
Personnel related (including stock-based compensation)	\$ 419	\$ 2,047	\$ 1,628
Professional fees	691	1,785	1,094
Facility-related and other	137	532	395
Total general and administrative expenses	<u>\$ 1,247</u>	<u>\$ 4,364</u>	<u>\$ 3,117</u>

General and administrative expenses were \$1.2 million for the year ended December 31, 2013, compared to \$4.4 million for the year ended December 31, 2014. The increase of \$3.2 million was primarily due to an increase in personnel related costs of \$1.6 million, which included an increase of \$1.0 million in stock-based compensation, an increase in professional fees of \$1.1 million and an increase in facility-related and other costs of \$0.4 million. Personnel related costs increased primarily due to the hiring of 11 new employees to support corporate operations and business development activities, including the hiring of our Chief Executive Officer in June 2014 and our Chief Financial Officer in November 2014. The increase in professional fees was due to an increase in accounting, audit and legal fees as a result of ongoing business activities. The increase in facility-related and other costs was primarily due to an increase in rent expense resulting from exercising an option of our lease to increase the rentable square footage.

Other Income (Expense), Net

Other income (expense), net for the year ended December 31, 2013 was an expense of \$0.1 million, compared to an expense of \$1.6 million for the year ended December 31, 2014. During the year ended December 31, 2014, there was an increase of \$0.2 million in interest expense incurred on borrowings under our loan and security agreement, as compared to the year ended December 31, 2013. In addition, the revaluation of preferred stock warrant liability for the year ended December 31, 2014 consisted of a \$1.4 million loss to adjust the fair value of our preferred stock warrant liability due primarily to an increase in the fair value of the underlying Series A-2 convertible preferred stock over that period. This preferred stock warrant liability relates to a warrant we issued in September 2013 in connection with entering into the loan and security agreement.

[Table of Contents](#)**Comparison of Years Ended December 31, 2012 and 2013**

The following table summarizes our results of operations for the years ended December 31, 2012 and 2013:

	Year Ended December 31,		Increase (Decrease)
	2012	2013	
	(in thousands)		
Revenue	\$ —	\$ —	\$ —
Operating expenses:			
Research and development	2,077	4,805	2,728
General and administrative	956	1,247	291
Total operating expenses	<u>3,033</u>	<u>6,052</u>	<u>3,019</u>
Loss from operations	<u>(3,033)</u>	<u>(6,052)</u>	<u>(3,019)</u>
Other income (expense):			
Interest income (expense), net	(93)	(42)	51
Revaluation of preferred stock warrant liability	—	(8)	(8)
Total other income (expense), net	<u>(93)</u>	<u>(50)</u>	<u>43</u>
Net loss	<u><u>\$ (3,126)</u></u>	<u><u>\$ (6,102)</u></u>	<u><u>\$ (2,976)</u></u>

Research and Development Expenses

	Year Ended December 31,		Increase (Decrease)
	2012	2013	
	(in thousands)		
Microbiome therapeutics platform	\$2,077	\$3,424	\$ 1,347
SER-109	—	729	729
SER-262	—	652	652
Total research and development expenses	<u><u>\$2,077</u></u>	<u><u>\$4,805</u></u>	<u><u>\$ 2,728</u></u>

Research and development expenses for the year ended December 31, 2012 were \$2.1 million, compared to \$4.8 million for the year ended December 31, 2013. The increase of \$2.7 million was primarily due to the following:

- an increase of \$1.3 million in research expenses related to our microbiome therapeutics platform, due primarily to increased spending on employee headcount and animal studies;
- \$0.7 million in initial expenses related to our SER-109 program, consisting primarily of spending on animal studies; and
- \$0.7 million in initial expenses of our SER-262 program, consisting primarily of spending on animal studies.

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General and Administrative Expenses

	Year Ended December 31,		Increase (Decrease)
	2012	2013	
	(in thousands)		
Personnel related (including stock-based compensation)	\$633	\$ 419	(214)
Professional fees	233	691	458
Facility-related and other	90	137	47
Total general and administrative expenses	<u>\$956</u>	<u>\$1,247</u>	<u>\$ 291</u>

General and administrative expenses were \$1.0 million for the year ended December 31, 2012, compared to \$1.2 million for the year ended December 31, 2013. The increase of \$0.3 million was primarily due to increased professional fees of \$0.5 million due to increased accounting and legal fees as a result of ongoing business activities, partially offset by decreased personnel related costs of \$0.2 million.

Other Income (Expense), Net

Other income (expense), net for the year ended December 31, 2012 was a net expense of \$0.1 million, consistent with the amount of expense for the year ended December 31, 2013.

Liquidity and Capital Resources

Since our inception, we have not generated any revenue and have incurred recurring net losses. We have financed our operations since inception primarily through private placements of our convertible preferred stock, the issuance of convertible promissory notes and borrowings under our loan and security agreement. From our inception through March 31, 2015, we had received gross proceeds of \$137.0 million from such transactions and we had repaid \$0.7 million of the total \$3.0 million borrowed under the loan and security agreement. As of March 31, 2015, we had cash, cash equivalents and investments totaling \$104.3 million and an accumulated deficit of \$35.8 million.

On September 9, 2013, we entered into the loan and security agreement, which provided for total borrowings of up to \$3.0 million. Through March 31, 2015, we had borrowed the full \$3.0 million available under the loan and security agreement and had made \$0.7 million of scheduled principal repayments. Under the loan and security agreement, we are obligated to make monthly, interest-only payments on any term loans funded under the facility until August 1, 2014 and, thereafter, to pay 30 consecutive, equal monthly installments of principal and interest from September 1, 2014 through February 1, 2017, the maturity date. Term loans under the loan and security agreement bear interest at an annual rate equal to 3.0% plus the greater of (1) the bank's prime rate and (2) the LIBOR rate plus 2.5% (the greater of which equated to 6.25% at March 31, 2015). In addition, a final payment of \$60,000 is due upon the earlier of the maturity date, acceleration of the term loans or prepayment of all or part of the term loans. Borrowings under the loan and security agreement are secured by substantially all of our assets, except for our intellectual property, which is subject to a negative pledge.

There are no financial covenants associated with the loan and security agreement. There are negative covenants restricting our activities, including limitations on dispositions, mergers or acquisitions; encumbering our intellectual property; incurring indebtedness or liens; paying dividends; making investments; and engaging in certain other business transactions. The obligations under the loan and security agreement are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in our business, operations or financial or other condition.

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In connection with entering into the loan and security agreement, in September 2013, we issued the lender a warrant to purchase 92,127 shares of our Series A-2 convertible preferred stock at an exercise price of \$1.78 per share.

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented:

	Year Ended December 31,			Three Months Ended	
	2012	2013	2014	March 31,	2015
	(in thousands)				
Cash used in operating activities	\$ (2,925)	\$ (5,321)	\$ (10,358)	\$ (1,423)	\$ (8,340)
Cash used in investing activities	(319)	(184)	(1,103)	(80)	(59,469)
Cash provided by (used in) financing activities	9,435	944	123,992	500	(1,331)
Net increase (decrease) in cash and cash equivalents	<u>\$ 6,191</u>	<u>\$ (4,561)</u>	<u>\$ 112,531</u>	<u>\$ (1,003)</u>	<u>\$ (69,140)</u>

Operating Activities. During the three months ended March 31, 2015, operating activities used \$8.3 million of cash, primarily resulting from our net loss of \$8.0 million and cash used from changes in our operating assets and liabilities of \$1.6 million, partially offset by non-cash charges of \$1.2 million. Net cash used for changes in our operating assets and liabilities during the three months ended March 31, 2015 consisted of a \$0.7 million increase in prepaid expenses and other current assets, a \$0.2 million decrease in accounts payable and a \$0.7 million decrease in accrued expenses and other current liabilities. The decreases in our accounts payable and accrued expenses were due to the timing of payments and a decrease in amounts accrued for clinical trial and contracted manufacturing expenses. The increase in prepaid expenses and other current assets was due primarily to prepayments made for clinical trial activities.

During the three months ended March 31, 2014, operating activities used \$1.4 million of cash, primarily resulting from our net loss of \$1.7 million, partially offset by non-cash charges of \$0.1 million and by cash provided by changes in our operating assets and liabilities of \$0.2 million. Net cash provided by changes in our operating assets and liabilities during the three months ended March 31, 2014 consisted primarily of a \$0.1 million increase in accounts payable and a \$0.1 million increase in accrued expenses and other current liabilities. The increase in accounts payable was due to the timing of vendor invoicing and payments. The increase in our accrued expenses was primarily due to an increase in our accruals for consultant fees.

During the year ended December 31, 2014, operating activities used \$10.4 million of cash, primarily resulting from our net loss of \$16.7 million, partially offset by non-cash charges of \$4.1 million and by cash provided by changes in our operating assets and liabilities of \$2.3 million. Net cash provided by changes in our operating assets and liabilities during the year ended December 31, 2014 consisted primarily of a \$0.8 million increase in accounts payable and a \$1.5 million increase in accrued expenses and other current liabilities. The increase in accounts payable was due to an overall increase in our development activities, primarily driven by expenditures in connection with advancing the development of SER-109. The increase in accrued expenses and other current liabilities was due to an increase in accruals for development and manufacturing costs related to SER-109; payroll and payroll-related costs due primarily to bonuses; legal and audit-related professional fees; and facility-related costs.

During the year ended December 31, 2013, operating activities used \$5.3 million of cash, resulting from our net loss of \$6.1 million, partially offset by non-cash charges of \$0.3 million and from cash provided by changes in our operating assets and liabilities of \$0.5 million. Net cash provided by

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changes in our operating assets and liabilities during the year ended December 31, 2013 consisted primarily of a \$0.3 million increase in accounts payable and a \$0.2 million increase in accrued expenses and other current liabilities. The increase in accounts payable was due to the timing of vendor invoicing and payments. The increase in accrued expenses and other current liabilities was primarily due to an increase in our accruals for consultant fees.

During the year ended December 31, 2012, operating activities used \$3.0 million of cash, primarily resulting from our net loss of \$3.1 million, partially offset by cash provided by changes in our operating assets and liabilities of \$0.1 million. Net cash provided by changes in our operating assets and liabilities during the year ended December 31, 2012 consisted primarily of a \$0.1 million increase in accounts payable due to the timing of vendor invoicing and payments.

Investing Activities. During the three months ended March 31, 2015, we used \$59.5 million of cash in investing activities, consisting of purchases of investments of \$59.3 million and purchases of property and equipment of \$0.2 million.

During the three months ended March 31, 2014, we used \$0.1 million of cash in investing activities, consisting of purchases of property and equipment.

During the year ended December 31, 2014, we used \$1.1 million of cash in investing activities, primarily consisting of purchases of property and equipment of \$1.0 million.

During the years ended December 31, 2012 and 2013, we used \$0.3 million and \$0.2 million of cash, respectively, in investing activities, primarily for purchases of property and equipment.

Financing Activities. During the three months ended March 31, 2015, net cash used in financing activities was \$1.3 million as a result of principal repayments of \$0.3 million of borrowings under our loan and security agreement and payments of initial public offering costs of \$1.1 million, both of which were partially offset by proceeds from the exercise of stock options of \$0.1 million.

During the three months ended March 31, 2014, net cash provided by financing activities was \$0.5 million as a result of net proceeds of \$0.5 million received from borrowings under our loan and security agreement.

During the year ended December 31, 2014, net cash provided by financing activities was \$124.0 million as a result of net proceeds of \$123.2 million received from our sale of Series B, Series C, Series D and Series D-1 convertible preferred stock and \$2.0 million from borrowings under our loan and security agreement. These amounts were partially offset by principal repayments of \$0.4 million of borrowings under our loan and security agreement and payments of IPO costs related to this offering of \$0.8 million.

During the year ended December 31, 2013, net cash provided by financing activities was \$0.9 million as a result of net proceeds of \$0.9 million borrowings under our loan and security agreement.

During the year ended December 31, 2012, net cash provided by financing activities was \$9.4 million as a result of net proceeds of \$8.9 million received from our issuance of our Series A and Series A-2 convertible preferred stock and proceeds of \$0.5 million from our issuance of convertible promissory notes, which were converted to Series A convertible preferred stock.

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing development activities related to SER-109, which is still in clinical development, and our follow-on therapeutics and other programs. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. We anticipate that our expenses will increase substantially if and as we:

- conduct our Phase 2 clinical study of SER-109, our lead product candidate;
- continue the research and development of our other product candidates, including commencing clinical trials for SER-262 and SER-287;
- seek to enhance our microbiome therapeutics platform and discover and develop additional product candidates, including SER-155;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- potentially establish a sales, marketing and distribution infrastructure and scale-up manufacturing capabilities to commercialize any products for which we may obtain regulatory approval;
- maintain, expand and protect our intellectual property portfolio;
- add clinical, scientific, operational, financial and management information systems and personnel, including personnel to support our product development and potential future commercialization efforts and to support our transition to a public company; and
- experience any delays or encounter any issues with any of the above, including but not limited to failed studies, complex results, safety issues or other regulatory challenges.

We expect that our existing cash and cash equivalents, together with anticipated net proceeds from this offering, will enable us to fund our operating expenses and capital expenditure requirements through at least . We have based this estimate on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development of SER-109 or our follow-on programs and because the extent to which we may enter into collaborations with third parties for development of these product candidates is unknown, we are unable to estimate the amounts of increased capital outlays and operating expenses associated with completing the research and development of our product candidates. Our future capital requirements for SER-109 or our other programs will depend on many factors, including:

- the progress and results of our Phase 2 clinical study of SER-109;
- the cost of manufacturing clinical supplies of our product candidates;
- the scope, progress, results and costs of pre-clinical development, laboratory testing and clinical trials for our other product candidates, including SER-287, SER-262 and SER-155;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs and timing of future commercialization activities, including manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;

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- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in businesses, products and technologies, including entering into licensing or collaboration arrangements for product candidates, although we currently have no commitments or agreements to complete any such transactions.

Identifying potential product candidates and conducting pre-clinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if ever. Accordingly, we will need to obtain substantial additional funds to achieve our business objectives.

Adequate additional funds may not be available to us on acceptable terms, or at all. We do not currently have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Additional debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends and may require the issuance of warrants, which could potentially dilute your ownership interest.

If we raise additional funds through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations at March 31, 2015 and the effect such obligations are expected to have on our liquidity and cash flows in future periods:

	Payments Due by Period				
	Total	Less Than 1 Year	1 - 3 Years	4 - 5 Years	More Than 5 Years
Operating lease commitments ⁽¹⁾	\$2,277	\$ 986	\$1,291	\$ —	\$ —
Debt obligations ⁽²⁾	2,606	1,311	1,295	—	—
Total	<u>\$4,883</u>	<u>\$ 2,297</u>	<u>\$2,586</u>	<u>\$ —</u>	<u>\$ —</u>

(1) Amounts in the table reflect payments due for our laboratory and office space in Cambridge, Massachusetts under two operating lease agreements that expire in February 2016 and January 2018. In April 2015, we entered into an additional lease for office and laboratory space in Cambridge, Massachusetts with a term expiring in April 2020. Future payments due under this lease are \$0.3 million during the year ending December 31, 2015, \$0.4 million during the years ending December 31, 2016 and 2017, \$0.4 million during the years ending December 31, 2018 and 2019, and \$0.1 million thereafter. Such amounts are not reflected in the table.

(2) Reflects the contractually required principal and interest payments payable pursuant to our loan and security agreement.

We enter into contracts in the normal course of business with CROs for clinical trials, pre-clinical research studies and testing, manufacturing and other services and products for operating purposes. These contracts generally provide for termination upon notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the Securities and Exchange Commission.

Recently Issued Accounting Pronouncements

In June 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2014-10, *Development Stage Entities*. The amendments in this update removed all incremental financial reporting requirements, including inception-to-date information and certain other disclosures currently required under GAAP, in the financial statements of development stage companies. The amendments are effective for annual reporting periods beginning after December 15, 2014 and interim reporting periods beginning after December 15, 2015. Early adoption is permitted. We elected to early adopt this guidance and, therefore, have not presented inception-to-date and other related disclosures in our consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*. The amendments in this update will explicitly require a company's management to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. The new standard will be effective in the first annual period ending after December 15, 2016. Early application is permitted. We are currently evaluating the potential impact of the adoption of this standard, but we believe its adoption will have no impact on our financial position, results of operations or cash flows.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation: Amendments to the Consolidation Analysis*, or ASU 2015-02, which modifies existing consolidation guidance for reporting organizations that are required to evaluate whether they should consolidate certain legal entities. ASU 2015-02 will be effective for annual periods beginning after December 15, 2015, and for interim periods within those fiscal years, and requires either a retrospective or a modified retrospective approach to adoption. Early adoption is permitted. We are currently evaluating the impact of the adoption of ASU 2015-02, but believe its adoption will have no material impact on our financial position, results of operations or cash flows.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on our consolidated financial statements upon adoption.

Quantitative and Qualitative Disclosure about Market Risk

Interest Rate Fluctuation Risk

We are exposed to market risk related to changes in interest rates. As of March 31, 2015, our cash, cash equivalents and investments consisted of cash, money market accounts and investments in corporate bonds and commercial paper with remaining maturities of less than one year. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. However, because of the short-term nature of the instruments in our portfolio, an immediate 10% change in market interest rates would not have a material impact on the fair market value of our investment portfolio or on our financial position or results of operations.

As of March 31, 2015, we had \$2.2 million of borrowings outstanding under term loans pursuant to our loan and security agreement with Comerica Bank. These term loans bear interest at an annual rate equal to 3.0% plus the greater of (1) the bank's prime rate and (2) the LIBOR rate plus 2.5%, thereby exposing us to interest rate risk. Based on the \$2.6 million of principal outstanding as of December 31, 2014, an immediate 10% change in the bank's prime rate or the LIBOR rate would not have a material impact on our debt-related obligations, financial position or results of operations.

BUSINESS

Overview

We are a microbiome therapeutics platform company developing a novel class of biological drugs, which we refer to as Ecobiotic microbiome therapeutics. The human microbiome is an ecology of microorganisms, including bacteria, fungi and viruses, that, when unhealthy, or dysbiotic, can leave the body more susceptible to infections, metabolic disorders, allergies, autoimmune disease, inflammation and other conditions. Our drugs are designed to restore health by repairing the function of a dysbiotic microbiome. We are initially focused on implementing our microbiome therapeutics platform to develop Ecobiotic microbiome therapeutics that treat dysbiosis in the colonic microbiome, one of the most diverse microbiomes in the human body. SER-109, our lead product candidate is designed to prevent further recurrences of *Clostridium difficile* infection, or CDI, a debilitating infection of the colon and, if approved by the U.S. Food and Drug Administration, or FDA, could be a first-in-field drug. In our Phase 1b/2 clinical study of SER-109 in recurrent CDI patients, 97% of patients achieved a clinical cure, which we defined as the absence of CDI requiring antibiotic treatment during the eight-week period after SER-109 dosing. Based on these data and discussions with the FDA, we initiated a Phase 2 clinical study of SER-109 for recurrent CDI and dosed the first patient in May 2015. We expect study results in the middle of 2016.

The human microbiome is one of the richest and most diverse ecosystems on earth, with a population of more than 100 trillion microorganisms that live in our intestines, mouth, skin and elsewhere in the body. Among the microbiomes in the human body, the colonic microbiome is one of the most diverse microbial communities. In a healthy, symbiotic state the colonic microbiome plays an important role in human health, helping the body digest food, resist pathogens, regulate the metabolic systems and synthesize essential nutrients and vitamins. However, the colonic microbiome may change in composition for a variety of reasons, including in response to long-term or high-dose antibiotics and following gastrointestinal infection. These changes in composition result in the loss of key microbes, resulting in a state of dysbiosis. Dysbiosis of the colonic microbiome is associated with a wide range of disease and infections, such as gastrointestinal infection and inflammatory and metabolic diseases.

While the study of the human microbiome is not new, the scientific community's understanding of the microbiome, and the colonic microbiome in particular, has been significantly advanced through genomics, which has enabled the broader understanding of the human microbiome at the organismal, functional and community level. Recently published scientific research has correlated dysbiosis in the colonic microbiome with numerous diseases and conditions in humans and in animal models, including: infections, metabolic disorders, allergies, autoimmune disease, inflammation and other non-specific conditions, such as irritable bowel syndrome, or IBS. Information regarding the impact of the colonic microbiome on various disease states is still emerging, although an increasing number of publications are appearing in leading scientific journals. There are currently no FDA-approved therapeutics that are designed to restore the microbiome to a healthy state.

We are developing a new approach to treating disease by restoring a dysbiotic colonic microbiome to a healthy state using our Ecobiotic microbiome therapeutics. Our approach is premised on the hypothesis that the proximal cause of many diseases is a dysbiosis in the natural state of the colonic microbiome that perpetuates the conditions that allow disease to take hold and flourish. We believe that the restoration of a dysbiotic colonic microbiome using rationally designed therapeutics represents a paradigm shift in the approach to treating the underlying disease. Our Ecobiotic microbiome therapeutics, which are derived from our microbiome therapeutics platform, are rationally designed ecological compositions, consisting of discrete combinations of beneficial microorganisms with targeted functional properties that provide the ability to re-establish keystone features of a functional microbiome in settings of disease.

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Our approach to discovery and design is based on an iterative bedside-to-bench-to-bedside drug discovery strategy that begins with data on the human microbiome that we gather from clinical studies. From this data, we identify the ecological differences between a healthy and a diseased microbiome, which we then use to rationally design potential Ecobiotic microbiome therapeutics. After further in-lab testing, selected Ecobiotic microbiome therapeutic candidates are moved back into the clinic for testing with humans. We apply a comparative genomic systems biology framework that leverages proprietary computation, microbiology and screening capabilities to design lead candidates targeted at these ecological deficiencies. We are able to apply this framework and experience to existing clinical data sets, as well as to the proprietary clinical data set we have generated through our SER-109 clinical trial. We believe we can utilize our knowledge and data to design Ecobiotic microbiome therapeutics to treat various medical conditions, such as non-*Clostridium difficile* infection and inflammatory and metabolic diseases. We also have advanced capabilities in the fermentation of colonic bacteria and the formulation of vegetative and spore forms of bacteria into therapeutics. We believe that the combination of experience, proprietary data and proprietary know-how that comprise our microbiome therapeutics platform provides us with a competitive advantage in the design and development of microbiome therapeutics. Further, our approach and platform, which enable the rational design, testing, optimization, formulation and manufacturing of Ecobiotic microbiome therapeutics, provide a framework that we believe can significantly reduce the time typically required to advance therapeutics to the clinic.

Using our microbiome therapeutics platform, we are developing our lead clinical product candidate, SER-109, which is designed to durably repair dysbiosis in the colonic microbiome in the setting of recurrent CDI. CDI is caused by the use of broad spectrum antibiotics which induce dysbiosis of the microbiome resulting in a colonization by *Clostridium difficile*, or *C. difficile*, a spore forming bacterium. CDI leads to severe and persistent diarrhea in infected individuals, but can also lead to more severe outcomes, such as inflammation of the colon, toxic megacolon and death. The U.S. Centers for Disease Control, or CDC, has identified CDI as one of the top three most urgent antibiotic-resistant bacterial threats in the United States. It is the most common cause of hospital acquired infection in the United States and has overtaken methicillin-resistant *Staphylococcus aureus*, or MRSA. CDI is responsible for the deaths of approximately 29,000 Americans each year. We estimate the incidence of primary CDI in the United States is between 640,000 and 820,000 patients per year. While the epidemiological data are varied outside the United States, we believe that, due to the widespread use of antibiotics, CDI is a growing global disease. The standard of care for CDI is to treat with antibiotics. In many cases, antibiotic treatments may resolve the acute infection caused by *C. difficile*. However, these antibiotic treatments kill bacteria indiscriminately, inducing a dysbiosis of the microbiome and potentially making patients more susceptible to a recurrence of CDI. For those patients who experience a recurrence of their CDI, we believe it is this dysbiosis of the microbiome, not the presence of *C. difficile*, which is the proximal cause of disease. Research suggests that the risk of recurrence is approximately 25% after the primary occurrence of CDI, 40% after a first recurrence and greater than 60% for those experiencing two or more recurrences. In addition, a recent randomized trial comparing two antibiotics for the treatment of primary CDI indicated that 8% of patients receiving fidaxomicin and 9% of patients receiving vancomycin did not respond to these antibiotics two days after completing their antibiotic regimen. Based on this information, we estimate that the addressable population of patients in the United States with recurrent CDI, defined as patients who have experienced at least three occurrences of CDI in the past nine months, is between 85,000 and 110,000 patients per year.

SER-109 is a bacterial spore ecology consisting of an average of 50 bacterial species derived from healthy donors' fecal matter that is designed to prevent further recurrences of CDI in patients suffering from recurrent CDI by restoring the dysbiotic microbiome to a state of health. In our recently completed open label Phase 1b/2 clinical study, 29 of 30 patients, or 97%, achieved a clinical cure, which we defined as the absence of CDI requiring antibiotic treatment during the eight-week period after SER-109 dosing. The study demonstrated that SER-109 is well-tolerated and has a favorable safety profile with no serious adverse events considered by the investigators to be attributable to SER-109 treatment. We also

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performed an analysis of the microbiome using next-generation sequencing technology and microbiological analysis. These studies demonstrated a re-establishment of keystone organisms and a rapid increase in bacterial diversity, which enable the restoration of the microbiome to a healthy state. Based on these results, we initiated a Phase 2 clinical study of SER-109 for recurrent CDI and dosed the first patient in May 2015. We expect study results in the middle of 2016. We plan to conduct manufacturing process pre-validation studies of SER-109 in the second half of 2015 to support a Phase 3 clinical trial and a potential biologics license application and commercial launch.

We believe the results of our open label Phase 1b/2 clinical study of SER-109 provide validation of the hypothesis underlying our microbiome therapeutics platform, supporting its further use to develop additional Ecobiotic microbiome therapeutics. Using the data we obtained from the SER-109 clinical trial, we are developing SER-262 as an Ecobiotic microbiome therapeutic designed to be used following antibiotic treatment of primary CDI to prevent the initial recurrence of CDI. SER-262 consists of bacteria that are a subset of the bacterial ecology comprising SER-109. Unlike SER-109, SER-262 strains are clonally isolated and produced in fermenters and do not require donations from human sources. Pre-clinical studies of SER-262 have demonstrated efficacy in preventing the initial recurrence of CDI in mouse and hamster models. We intend to initiate clinical studies of SER-262 in the middle of 2016.

In addition to our CDI product candidates, we are utilizing our microbiome therapeutics platform to develop SER-287 to treat inflammatory bowel disease, or IBD, including ulcerative colitis, and SER-155 to treat enteric pathogens, such as antibiotic-resistant bacteria. We are also researching Ecobiotic microbiome therapeutics for the treatment of metabolic diseases, such as early-stage, non-insulin dependent diabetes; other inflammatory diseases, such as Crohn’s disease; and infections related to antibiotic use, cancer chemotherapy and immune suppression.

The following chart summarizes our current product pipeline:

Program	Discovery	Pre-Clinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
SER-109 Recurrent CDI						Results of Phase 2 clinical study in the middle of 2016
SER-262 Primary CDI ⁽¹⁾						Initiate clinical studies in the middle of 2016
SER-287 Ulcerative colitis						Initiate Phase 1 study by the end of 2015
SER-155 Antibiotic-resistant bacteria & post-antibiotic restoration						Continue pre-clinical screening efforts to identify indication

(1) We are developing SER-262 to be used following antibiotic treatment of primary CDI to prevent initial recurrence of CDI.

We have assembled a world class group of scientists, clinicians, directors and investors, who have established our leadership in the field of microbiome therapeutics. We were co-founded by Drs. Noubar Afeyan, David Berry and Geoffrey von Maltzahn of Flagship VentureLabs, the innovation foundry of Flagship Ventures, which has founded 27 life sciences companies. Through Flagship VentureLabs' contribution of foundational scientific concepts and intellectual property, assembly of our management team and critical early-stage support, we launched as the first company focused on the ecological nature of the microbiome. Led by Dr. Roger Pomerantz, our Chairman, President and Chief Executive Officer, our experienced management team possesses core capabilities in microbiome therapeutics, infectious disease, drug development, commercialization, chemistry, manufacturing and controls, or CMC, public company management and finance. Dr. Pomerantz, an infectious disease physician-scientist, has extensive experience in infectious disease drug development and commercialization, licensing and acquisitions gained over a 10-year career in senior executive positions at Merck & Co, Johnson & Johnson and Tibotec Pharmaceuticals. Dr. Pomerantz led the development and commercialization of eight FDA-approved infectious disease drugs in his career. In addition to Dr. Pomerantz, our management team includes Mr. Eric Shaff, Dr. David Cook, Dr. John Aunins, Dr. Michele Trucksis and Dr. Matthew Henn. Collectively, our management team has successfully developed 18 approved pharmaceutical drugs in infectious disease and other indications. Our management team has extensive experience in microbial ecology, microbiology and live biologicals, with a collective 23 years studying the microbiome and over 60 published papers on the science of the microbiome. Additionally, our team has extensive experience in building out commercial capabilities in specialty diseases and has a track record for success in launching vaccine products, which have analogous manufacturing processes to that of Ecobiotic microbiome therapeutics. In November and December 2014, we completed two preferred stock financings, which included as investors several prominent mutual funds and healthcare dedicated funds, as well as a multinational health-science company.

Our Strategy

Our goal is to become the leading biopharmaceutical company developing and commercializing microbiome therapeutics to address significant unmet medical needs. The critical components of our strategy include:

- **Rapidly advancing the development of our lead product candidate, SER-109, for the prevention of further recurrences of CDI in patients with recurrent CDI.** Based on the results from our recently completed Phase 1b/2 clinical study of SER-109, we dosed the first patient in a Phase 2 clinical study in May 2015 in patients with three or more occurrences of CDI within the previous nine months. We have an investigational new drug application, or IND, with the FDA for the Phase 2 clinical study. We expect to enroll 87 patients in a double-blinded and placebo-controlled clinical trial, with patients randomized in a ratio of 2:1 into a SER-109 arm or placebo arm. The primary endpoint of the trial will be the absence of CDI recurrence requiring antibiotic treatment during the eight-week follow-up period after dosing. We also plan to follow patients for an additional 16 weeks to document the safety profile of SER-109 compared to placebo. Secondary endpoints include the time to CDI recurrence and the proportion of patients experiencing CDI recurrence at four weeks, 12 weeks and 24 weeks. We also plan to compare changes in the composition of the colonic microbiome from baseline to Week 24 post-treatment using genomic analysis. In addition, subjects that recur in either arm of the study will have the option to enroll in a parallel open label safety study in which patients will receive SER-109. We expect results from the Phase 2 clinical study in the middle of 2016. Following the analysis of the data to come from our Phase 2 clinical study, we plan to meet with the FDA to present Phase 2 safety and efficacy results and a proposed protocol for the Phase 3 clinical trial. We plan to initiate the Phase 3 clinical trial in 2016.
- **Advancing the clinical development of SER-262 to be used following antibiotic treatment of primary CDI to prevent an initial recurrence of CDI.** We are developing SER-262 as a

therapeutic to be used following antibiotic treatment of primary CDI to prevent an initial recurrence of CDI. SER-262 contains a subset of the bacterial ecology comprising SER-109, however, SER-262 is not derived from human stool and is made in bacterial fermenters in a rational *in vitro* design. Pre-clinical studies of SER-262 have demonstrated efficacy similar to SER-109 in mouse and hamster models of CDI. We intend to initiate clinical studies of SER-262 in the middle of 2016.

- ÿ **Initiating the clinical development of SER-287 for the treatment of IBD, including ulcerative colitis.** We have an active pre-clinical program to develop SER-287 for the treatment of IBD, including ulcerative colitis, which, based on current research and our experience with SER-109, we believe can be treated by restoring the underlying dysbiotic microbiome. We anticipate initiating a Phase 1b proof-of-concept clinical trial for SER-287 for ulcerative colitis by the end of 2015.
- ÿ **Developing SER-155 for the treatment of antibiotic resistant bacteria.** We are designing and developing SER-155, an Ecobiotic microbiome therapeutic that is expected to have activity against enteric bacterial pathogens. We expect SER-155 to be used for the treatment of antibiotic-resistant bacteria to eliminate colonization and prevent infection.
- ÿ **Leveraging our leading microbiome therapeutics platform to develop additional innovative and novel Ecobiotic microbiome therapeutics across a range of medical conditions with high unmet need.** We believe that the combination of experience, proprietary data and proprietary know-how related to the microbiome and of the production of microbial strains provides us a competitive advantage in the design and development of microbiome therapeutics. Our platform enables us to build upon our existing and growing clinical experience to rationally approach the treatment of acute and complex chronic diseases. We intend to leverage this advantage to develop additional innovative Ecobiotic microbiome therapeutics.
- ÿ **Commercializing our Ecobiotic microbiome therapeutics, including SER-109, directly in the United States and with collaborators outside the United States.** We have retained the worldwide rights to SER-109 and SER-262 and expect to initially maintain similar rights with respect to other Ecobiotic microbiome therapeutics we develop. We believe the market for recurrent CDI is sufficiently concentrated to permit us to effectively commercialize SER-109 in the United States with a direct sales force of less than 100 individuals. We intend to leverage the experience gained by commercializing SER-109 in the United States to further build our direct sales force to address the larger patient population to be addressed by SER-262. Outside the United States and for chronic diseases in larger populations, we expect to rely on collaborators to commercialize our Ecobiotic microbiome therapeutics.
- ÿ **Developing manufacturing capabilities sufficient to support commercialization of any approved Ecobiotic microbiome therapeutic candidates.** If approved by the FDA, we believe SER-109 could be a first-in-field drug, which will require manufacturing capabilities that are distinct from other biologic drugs. We intend to make strategic investments in manufacturing capabilities to help ensure that we maintain control of our know-how and also because we believe these capabilities will be necessary and highly advantageous for the development of future Ecobiotic microbiome therapeutics such as SER-262. Our bioprocess and manufacturing personnel are focused on creating a platform of manufacturing expertise that will set the stage for further advances in the emerging field of microbiome therapeutics.

Understanding the Microbiome and Its Impact on Disease

The human microbiome is one of the richest and most diverse ecosystems on earth with a population of more than 100 trillion microorganisms that live in our intestines, mouth, skin and elsewhere in the body. These microbiomes have numerous beneficial functions necessary to supporting health, such as digesting food, preventing disease-causing bacteria from invading the body, regulating our immune system and synthesizing essential nutrients and vitamins. Among the various microbiomes in the human body, the colonic microbiome is one of the most diverse microbial communities. At up to 100 billion to one trillion cells per milliliter, it is among the densest microbial ecosystems ever observed. In a healthy, symbiotic state the colonic microbiome enables the body to function normally. However, we believe the colonic microbiome can change in composition, such as in response to long-term or high-dose exposure to antibiotics or following a gastrointestinal infection. As a result, there is a loss of key microbes that results in a state of dysbiosis. Dysbiosis of the microbiome is associated with a wide range of disease and infections.

Although bacteria are often associated with infection and disease, much of the bacteria that colonize the human body are essential for life. Until recently, few scientific studies existed that focused on the benefits of the bacteria comprising the microbiome. In 2005, the National Institutes of Health funded the Human Microbiome Project, or HMP, which had as one of its goals the characterization of the microbiome with enough specificity to enable the study of variations in the microbiome and their influence on disease.

Historically, researchers studied microbes in patients by isolating pathogens and growing them in culture. This process typically identifies only a limited diversity of microbial species. The HMP used genomic sequencing technologies to analyze 5,000 samples, representing more than 3.5 terabases of genome sequence data, to identify specific genetic signals found only in bacteria. HMP researchers calculate that more than 10,000 microbial species occupy the human ecosystem, and these researchers believe they have characterized the normal range of microbial variation in the U.S. population. Importantly, HMP researchers have discovered that different consortia of microbes may accomplish the same metabolic activity, and the presence of those metabolic activities is more important than the exact species of microbe providing the function. Results from the HMP have provided a robust baseline microbiome against which disease states can be compared.

With data developed by the HMP, numerous scientific studies are emerging in both animals and humans, suggesting that many human diseases can be correlated with dysbiosis of the microbiome. These include infections and diseases, such as CDI or vancomycin-resistant *Enterococcus*, or VRE; metabolic disorders, such as early-stage, non-insulin dependent diabetes, obesity and non-alcoholic fatty liver disease; allergies; autoimmune disease; inflammatory diseases, such as ulcerative colitis, Crohn's disease and pouchitis; and other non-specific conditions such as irritable bowel syndrome. Examples of some studies include:

- The results of a study published in *PLOS Pathogens* in 2012 suggested that a mixture of six different bacteria found naturally in the gastrointestinal system of mice, when isolated from stool and reintroduced into the infected mice, was effective at suppressing CDI. Researchers in the study found that a single treatment of the bacteria was sufficient and that the suppression lasted for months.
- An article published in the *Annals of the New York Academy of Sciences* in 2011 reviewed data from various animal and human studies linking alterations in the colonic microbiome with type 1 diabetes. The article concluded, among other things, that the microbiota in the gastrointestinal tract, through their impact on the development of the immune system and the structure of the intestine, are vital to the pathogenesis of type 1 diabetes, though the mechanisms by which this occurred were still unclear.

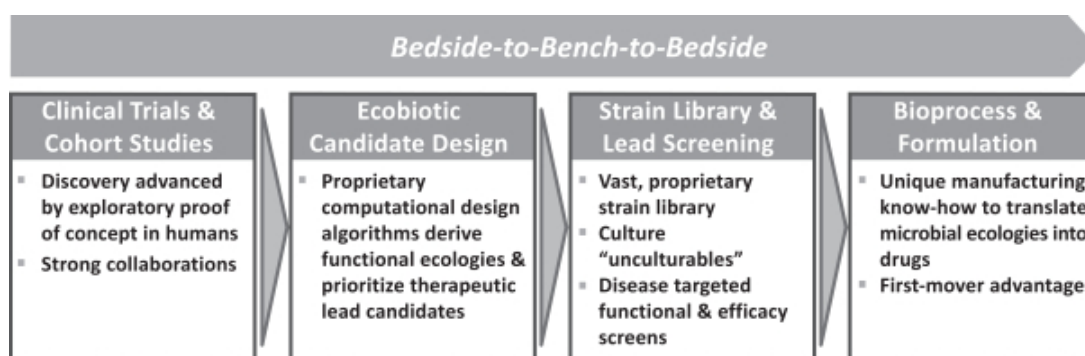
- A study published in *Nature* in 2006 suggested that the microbiome of obese mice demonstrated an increased capacity to harvest energy from the diet. Additionally, the study suggested this trait was transmissible, and the colonization of germ-free mice with the microbiota from obese mice resulted in significantly greater total body fat than colonization with microbiota from a lean mouse. These results suggest the microbiome of the gastrointestinal tract is a contributing factor to the pathophysiology of obesity.
- An article published in *Science* in 2011 suggested that a bacterium found in the gastrointestinal tract of humans appeared to keep mice safe from food allergies. The study noted that mice given antibiotics early in life were far more susceptible to peanut sensitization, a model of human peanut allergy. When these mice were given a solution containing Clostridia, a common class of bacteria found in the gastrointestinal tract, the animals' peanut sensitization disappeared. The same reaction was not obtained when another common type of bacteria, *Bacteroides*, was introduced to similarly situated mice. Researchers concluded that the Clostridia were operating in the gastrointestinal tract to keep peanut proteins that caused allergic reactions out of the blood stream.

There are currently no microbiome therapeutics approved by the FDA. We believe that the ability to develop drugs that are able to modulate the microbiome and return a dysbiotic microbiome to its healthy state presents a significant opportunity to improve human health.

Our Microbiome Therapeutics Platform

We are developing a new approach to restoring health in settings of microbiome dysbiosis by using our microbiome therapeutics platform to develop Ecobiotic microbiome therapeutics. Our microbiome therapeutics platform is premised on the hypothesis that the proximal cause or significant contributor to multifactorial diseases is a dysbiosis of the colonic microbiome. We believe this represents a paradigm shift in approaching the way the underlying disease is defined and can be treated. Our microbiome therapeutics are a novel class of biological drugs designed to treat disease by restoring a dysbiotic microbiome to a state of health. They represent rationally defined ecological compositions, consisting of discrete combinations of beneficial microorganisms with targeted functional properties that provide the ability to re-establish keystone features of a functional microbiome in settings of disease.

Our microbiome therapeutics platform integrates genomic and related data sets, proprietary algorithms and computational analysis, sequencing and screening and clinical insights. This platform allows us to rationally design, test, optimize, formulate and manufacture Ecobiotic microbiome therapeutics. Our microbiome therapeutics platform provides a framework that we believe can significantly reduce the time typically required to advance therapeutics to the clinic. The following diagram depicts the steps in our fully end-to-end microbiome therapeutics platform:

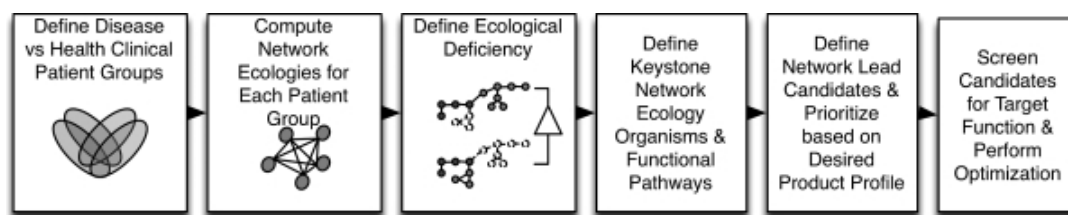


Clinical Trials and Cohort Studies

Our discovery process begins with human data derived from clinical trials and cohort studies, which we use as a basis for designing our Ecobiotic microbiome therapeutics. This allows us to compare the colonic microbiome of healthy normal individuals to those in a dysbiotic state, revealing the ecological signatures of microbiome differences that we target using our Ecobiotic microbiome therapeutics. Additionally, our experience with SER-109 serves as a critical dataset for humans, instructing us on how the introduction of certain keystone microbes can facilitate and augment the restoration of a dysbiotic colonic microbiome for other indications. Using these proprietary insights and tools we can evaluate emerging data sets that link a change in the microbiome with various diseases and define therapeutic lead candidates. A study conducted with fecal transplantation in the setting of insulin resistance suggested that lean donor microbiomes can increase insulin sensitivity in subjects with metabolic syndrome. By using our genomic data sets and our proprietary tools combined with our experience with SER-109, we integrate clinical results into bench research to design our Ecobiotic microbiome therapeutics.

Ecobiotic Candidate Design

We have developed a candidate design program to assist us in identifying the keystone structural and functional elements of healthy microbiomes, the deficiencies present in disease states and the functional profile of a microbial ecological network that can return the microbiome to a healthy state. The following diagram depicts the steps in our candidate design program:



Our candidate design program applies computational comparative genomics and systems biology methods to analyze existing clinical data sets, such as those derived from the SER-109 Phase 1b/2 clinical study, to elucidate the structure and function of a healthy microbiome relative to a microbiome in a disease state. The structure is defined in terms of the organisms that comprise the ecology of the microbiome while the function is defined in terms of the genes and metabolic pathways inherent to the organisms that comprise that ecology. Structure and functional properties of a microbiome are determined using our proprietary algorithms that derive actual ecological networks that characterize the microbiome of subjects with a particular disease or that are in a state of health. Our algorithms define those organisms that impact the structure of the microbial communities and the health of the microbiome, which we refer to as keystone organisms, and their associated critical, functional biological pathways. Keystone organisms and their associated critical, functional biological pathways may exist in low, moderate, or high abundance in an ecology of microbes, but are often missing or at reduced levels in an individual with disease. By comparing the ecologies in healthy and disease states, we are able to identify the ecological deficiencies and missing keystone components that characterize the disease state and are the target of our Ecobiotic microbiome therapeutics.

Ecobiotic microbiome therapeutics are rationally designed to solve for the microbiome ecological deficiencies identified between disease and health states. Rational design involves the determination, prioritization and optimization of microbial network ecologies with the greatest therapeutic potential based on critical factors, such as the evolutionary relationships of the microbes, theoretical and empirically defined functional capabilities, safety profile of strains and various bioprocessing parameters. We maintain a proprietary design and discovery database that captures and integrates

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key information about microbial strains. Our design algorithms in combination with our functional screening capabilities enable us to identify lead candidate compositions that possess the necessary functional profile to restore the ecological deficiency that causes the dysbiosis.

Strain Library and Lead Screening

To facilitate the screening of network ecologies and individual strains, we have developed and maintain proprietary know-how on the isolation, cultivation and fermentation of a host of microbial strains. Using information from our strain library, we develop and execute moderate- to high-throughput *in vitro* and *ex vivo* screens that evaluate the efficacy and functional properties of lead candidates and individual microbial strains that comprise the lead candidate ecologies. Once we have a lead candidate we screen the therapeutic to evaluate its efficacy and functional properties in disease relevant models. We conduct experiments in specific *in vivo* models on a reduced set of candidates that are relevant to the disease indications we are investigating.

Bioprocess and Formulation

Our Ecobiotic microbiome therapeutics in development consist of combinations of bacteria or bacterial spores rather than single strains. As a result, we must be able to produce, purify and formulate multiple strains of bacteria economically and be able to test the composition of a combination product for quality control. Our bioprocess development and manufacturing processes are designed to address each of these elements.

- ÿ *Fermentation:* We employ platform fermentation processes as starting conditions for current good manufacturing processes, or cGMP, production schemes and, when required, plan to develop strain specific process parameters.
- ÿ *Purification:* Similar to fermentation, we use small-scale purification operations to complete bench-scale manufacturing and quickly assess the final process yield, quality and robustness.
- ÿ *Formulation:* Our Ecobiotic microbiome therapeutics are combinations of cells and bacterial spores and can be administered by a number of methods and by different routes to effect the primary goal of delivering the bacteria to the intended location in a condition where they are able to replicate and correct dysbiosis. Currently, our Ecobiotic microbiome therapeutics are designed to be administered in oral form.
- ÿ *Analytical:* We intend to address quality control requirements for our Ecobiotic microbiome therapeutics using proprietary microbiological and sequence-based testing schemes, including high-throughput quantitative analytics to assess the identity, potency and purity of the final product.

Pre-clinical and Clinical Testing

One of the key competitive advantages of microbiome therapeutics is that we believe they will not need to undergo the same pre-clinical testing that other modalities such as small molecules require. Because the components of our Ecobiotic microbiome therapeutics are found naturally in the body, we do not expect to need carcinogenicity studies or studies designed to evaluate how our Ecobiotic microbiome therapeutics interact with other drugs. Further, we expect that we will not need to conduct traditional Phase 1 pharmacokinetic studies. Clinical pharmacokinetic studies are performed to examine the absorption, distribution, metabolism and excretion of a drug under investigation. Because our Ecobiotic microbiome therapeutics are not absorbed and, therefore, remain in the colonic microbiome, we believe such trials will not be necessary and we expect to proceed directly to patients with the disease that we are studying. These pre-clinical and clinical studies are costly and time-consuming and the ability to proceed in development without them provides an advantage as compared to traditional drug development. For example, based on our correspondence with the FDA, further pre-clinical studies will not be needed by the FDA for SER-109. In addition, we have confirmed

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with the FDA that we do not need Phase 2 dose ranging studies. While we expect to file INDs for our future product candidates, we have not yet discussed with the FDA what testing will be required, but we believe the same requirements for SER-109 will apply across our other product candidates.

Our Management Team

We were co-founded by Drs. Noubar Afeyan, David Berry and Geoffrey von Maltzahn of Flagship VentureLabs, the innovation foundry of Flagship Ventures, which has founded 27 life sciences companies. Through Flagship VentureLabs' contribution of foundational scientific concepts and intellectual property, assembly of our management team and critical early-stage support, we launched as a company focused on the ecological nature of the microbiome. We are led by a team of experienced pharmaceutical industry executives and recognized experts in infectious diseases, microbiome therapeutics and biological manufacturing.

Our management team includes Dr. Roger Pomerantz, our Chairman, President and Chief Executive Officer, who has extensive experience in infectious disease, drug development and commercialization, licensing and acquisitions gained over a 10-year career in senior executive positions at Merck & Co, Johnson & Johnson and Tibotec Pharmaceuticals. Mr. Eric Shaff, our Chief Financial Officer and Executive Vice President, has over 10 years of corporate finance and accounting experience in the biotechnology industry, including as Vice President of Finance at Genzyme Corporation and, most recently, Vice President of Corporate Finance at Momenta Pharmaceuticals. Mr. Shaff was responsible for overall financial management at Momenta, including public company reporting, accounting and risk management. Dr. David Cook, our Chief Scientific Officer and Executive Vice President of Research & Development, has served in a variety of executive positions in his 22-year career including as the Chief Operating Officer for the International AIDS Vaccine Initiative and the founding Chief Executive Officer at Anza Therapeutics, a biotechnology start-up developing a novel microbial vaccine platform. Dr. John Aunins, our Chief Technology Officer and Executive Vice President of Bioprocess Development, has worked in the biotechnology field for 24 years. Dr. Aunins has deep experience in bioprocess development, manufacturing support and project leadership. He led process and product development teams at Merck Research Laboratories for Vagta, Varivax, Zostavax, ProQuad, Rotateq and Gardasil. Dr. Michele Trucksis, our Chief Medical Officer, has over 25 years of clinical research and medical experience focused in infectious diseases. Prior to joining our company, Dr. Trucksis was Executive Director, Team Leader & Clinical Lead at Merck Research Laboratories, where she was responsible for medical, clinical and global product development and strategy in antibacterials and antifungals. Dr. Matthew Henn, our Head of Drug Discovery & Bioinformatics and Vice President, has over 16 years of combined research experience in microbial ecology, genomics and bioinformatics. Prior to joining our company, he was the Director of Viral Genomics and Assistant Director of the Genome Sequencing Center for Infectious Diseases at the Broad Institute of Harvard and MIT.

Our Product Pipeline

We believe our Ecobiotic microbiome therapeutics represent a novel approach with potential application across a broad range of human diseases. Our most advanced drug development programs are focused on the area of gastrointestinal infections, where the causal link between dysbiosis of the microbiome and susceptibility to disease has been established. In addition to our CDI product candidates, SER-109 and SER-262, we are utilizing our microbiome therapeutics platform to develop Ecobiotic microbiome therapeutics to treat IBD, including ulcerative colitis, and enteric pathogens, such as antibiotic-resistant bacteria. We are also researching Ecobiotic microbiome therapeutics for the treatment of metabolic diseases, such as early-stage, non-insulin dependent diabetes; other inflammatory diseases, such as Crohn's disease; and infections related to antibiotic use, cancer chemotherapy and immune suppression.

The following chart summarizes our current product pipeline:

Program	Discovery	Pre-Clinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
SER-109 Recurrent CDI						Results of Phase 2 clinical study in the middle of 2016
SER-262 Primary CDI ⁽¹⁾						Initiate clinical studies in the middle of 2016
SER-287 Ulcerative colitis						Initiate Phase 1 study by the end of 2015
SER-155 Antibiotic-resistant bacteria & post-antibiotic restoration						Continue pre-clinical screening efforts to identify indication

(1) We are developing SER-262 to be used following antibiotic treatment of primary CDI to prevent initial recurrence of CDI.

Our CDI Product Candidates

We are developing SER-109 as an Ecobiotic microbiome therapeutic designed to prevent further recurrences of CDI in patients suffering from recurrent CDI, defined as at least three occurrences of CDI in a nine-month period, by restoring the dysbiotic microbiome to a healthy state. In our recently completed Phase 1b/2 clinical study, 26 of 30 patients, or 87% of patients, achieved the primary efficacy endpoint of experiencing no diarrhea associated with a positive *C. difficile* test during the eight weeks post-treatment. Additionally, 29 of 30 patients, or 97% of patients, achieved a clinical cure, which we defined as the absence of CDI requiring antibiotic treatment during the eight-week period after SER-109 dosing. The results of the trial suggest a favorable safety profile with no serious adverse events considered by the investigators to be attributable to SER-109. We also performed an analysis of the microbiome using next-generation sequencing technology and microbiological analysis. These studies demonstrated a re-establishment of keystone organisms and a rapid increase in bacterial diversity, which enable the restoration of the microbiome towards a healthy state. Based on these results, we initiated a Phase 2 clinical study of SER-109 for recurrent CDI and dosed the first patient in May 2015. We expect study results in the middle of 2016. We plan to conduct manufacturing process pre-validation studies of SER-109 in the second half of 2015 to support a Phase 3 clinical trial and a potential biologics license application and commercial launch.

We are also developing SER-262 to be used following antibiotic treatment of primary CDI to prevent an initial recurrence of CDI. Pre-clinical studies of SER-262 have demonstrated efficacy similar to SER-109 in mouse and hamster models of CDI. We intend to initiate clinical studies of SER-262 in the first half of 2016.

If approved, we believe these two product candidates will enable us to provide a more effective and safer treatment for preventing the recurrence of CDI than the current standard of care.

***Clostridium difficile* Infection, or CDI**

C. difficile is a Gram-positive, toxin-producing, spore forming bacterium that causes severe and persistent diarrhea in infected individuals, but can also lead to more severe outcomes, such as pseudomembranous colitis, toxic megacolon and death. *C. difficile* bacteria express toxins that disrupt the structural architecture of cells causing leakage of fluids through the gastrointestinal epithelium. The cells disrupted by these toxins eventually undergo apoptosis and die, releasing their contents into the colon, resulting in inflammation of the colon, severe and persistent diarrhea and, in the most serious cases, death.

CDI is generally not present in healthy adults, although approximately 1% to 5% of adults may carry low levels of *C. difficile* without clinical symptoms. CDI is most often associated with the prior use of antibiotics, although age and poor immune status are important risk factors as well. Antibiotics are thought to decrease resistance to CDI by causing dysbiosis in the microbiome. Since *C. difficile* spores are able to survive for long periods of time outside the body, and because healthcare settings are often sites of significant antibiotic use, CDI transmission rates in hospitals, long-term acute care facilities and nursing homes have been increasing. CDI is also a cause of morbidity and mortality among hospitalized cancer patients and bone marrow transplant patients as their immune systems are suppressed by cytotoxic drugs, which are drugs that inhibit or prevent the function of cells, and they may be heavily treated with antibiotics to treat infections. More recently, the rise of community-acquired CDI has been recognized as a growing problem.

The CDC has identified *C. difficile* as one of the top three most urgent antibiotic-resistant bacterial threats in the United States. It is the most common cause of hospital acquired infection in the United States, having overtaken MRSA. CDI is responsible for the deaths of approximately 29,000 Americans each year. CDI is also very costly to the healthcare system. According to a study published in *Clinical Infectious Diseases*, the economic burden of CDI in 2008 in U.S. acute care facilities alone was estimated to be as much as \$4.8 billion. In addition, a summary of studies published in 2009 in *The Journal of Hospital Infection*, calculated that the treatment cost per episode of primary CDI was as much as \$5,000 and as much as \$18,000 per recurrence of CDI. The CDC estimates the incidence of primary CDI by focusing on 10 catchment areas covering 11 million residents. Based on this analysis, it is estimated that there are approximately 453,000 new cases of primary CDI per year. Further, according to a 2014 article in the *American Journal of Infection Control*, from 2001 to 2010, incidence of CDI per 1,000 patients discharged increased from 4.5 to 8.2 with an average hospital stay of eight days. We believe the CDC method underestimates incidence based on several factors. First, residents who are diagnosed outside of their catchment area are not included in estimates. Second, many of the CDC diagnostic labs use a lower sensitivity test, which results in about 20% lower detection rates than the current most sensitive method. In addition, the CDC approach misses community cases, which are estimated to account for 30% to 40% of total cases. As a result, we estimate the incidence of primary CDI in the United States is between 640,000 and 820,000 patients per year. Additional research suggests that the risk of recurrence is approximately 25% after primary CDI, 40% after a first recurrence and greater than 60% for those experiencing two or more recurrences. In addition, in a recent randomized trial comparing two antibiotics for primary CDI, 8% of patients receiving fidaxomicin and 9% of patients receiving vancomycin did not respond two days after completing their antibiotic regimen. Based on this information, we estimate that the addressable population of patients in the United States with recurrent CDI, defined as patients who have experienced at least three occurrences of CDI in the past nine months, is between 85,000 and 110,000 patients per year.

Outside of the United States, it is difficult to estimate the incidence of CDI, primarily given the lack of standardized national surveillance schemes. However, data from the recently completed EUCLID study, the largest ever prevalence study of CDI across Europe, were presented at the 2014 European Congress of Clinical Microbiology and Infectious Diseases. The study results suggest that the incidence of CDI in Europe has increased from 4.1 to 7.9 cases per 10,000 patient bed days between 2008 and 2012-13.

Current and developing treatment alternatives and their limitations

The treatment alternatives for patients with CDI include antibiotics, fecal microbiota transplantation, or FMT, over-the-counter probiotics, antibodies and vaccines.

Antibiotics

The current standard of care for CDI is to treat with antibiotics, such as metronidazole and vancomycin. Metronidazole has been found to be effective for primary CDI, but approximately 29% of patients experience recurrence. It is not recommended for severe disease, nor is it used beyond first recurrence due to side effects. Vancomycin is more expensive, but has a lower relapse rate of 25%. In addition, fidaxomicin, a recently approved antibiotic for CDI, may have higher initial efficacy compared to metronidazole, but it does not have a label claim to reduce or prevent CDI recurrence. No antibiotic therapeutics are currently approved for treatment of recurrence of CDI.

Recurrent CDI, defined as three or more occurrences of CDI in a nine-month period, is not well addressed by any of the available antibiotics. When a patient has recurred two or more times after the initial occurrence, antibiotic relapse rates are greater than 60% and the probability of additional relapse increases with successive cycles. Some physicians resort to pulse-taper regimens of vancomycin lasting six weeks or more, but there are no well-controlled clinical studies that show such regimens are effective. In extreme cases, patients are treated continuously for years with vancomycin, even while they continue to experience gastrointestinal symptoms including diarrhea and abdominal discomfort.

The primary limitation of antibiotics is that their use appears to exacerbate dysbiosis. Recent research in animal models has shown that antibiotic use not only eliminates many healthy bacteria in the gastrointestinal tract, but also leads to the release of nutrients that facilitate the growth of *C. difficile*. Antibiotics have also been shown to change the ratio of primary versus secondary bile acids in the colon by killing bacteria required to metabolize bile acids. This shift to a predominance of primary bile acids further facilitates the growth of *C. difficile*, as it requires primary bile acids for germination of its spores. As a result, antibiotic use may induce a lasting dysbiosis that makes it possible for *C. difficile* to colonize a person and then cause, or further perpetuate, disease.

Fecal microbiota transplantation

FMT, also known as a stool transplantation, is a procedure during which donated stool, including fecal microbes, is typically instilled via colonoscopy into a patient with CDI. We believe that the impressive efficacy of FMT, which has resulted in cure rates for recurrent CDI ranging from 81% to 93%, essentially confirms the role of dysbiosis as a cause of the disease. However, FMT presents several challenges for effective treatment of the disease. FMT has the potential to transmit infectious or allergenic agents between hosts, involves the transmission of potentially hundreds of unknown strains of bacteria, fungi and viruses from donor to subject, and is difficult to perform on a mass scale. Additionally, FMT is inherently non-standardized so that different desired and/or undesired material may be transmitted in any given donation. FMT is not approved by the FDA and we believe it may be unable to gain such approval since the product, to our knowledge, cannot be standardized and characterized according to current regulatory requirements for identity, potency, purity and safety.

Probiotic therapies

Probiotics represent a group of products typically available over the counter in supplements and in some foods, which contain a smaller number of species of bacteria. However, to date there have been no clinical studies that have established the ability of probiotics to repair a dysbiosis of the microbiome. Further, there is neither a legally recognized definition of, nor a standard of identity for, the term probiotic in the United States or Europe. Recently, the European Food Safety Authority rejected many of the claims of health benefits associated with probiotics because the microbes had not been

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sufficiently characterized, the claimed effect was not considered beneficial and human studies in support of the claims had not been made available. As a result, after December 14, 2012, food and nutritional supplements companies were no longer allowed to communicate health benefits for their products on account of probiotic content in the European Union.

Antibodies and vaccines

Antibodies and vaccines are also in development to treat CDI. Antibodies suppress toxins to alleviate the symptoms of CDI, but they do not address the underlying dysbiosis of the microbiome, which we believe is the cause of recurrent CDI. Antibodies also require intravenous infusion and are more costly to produce relative to other treatments, such as antibiotics. The efficacy of vaccines in treating CDI in humans currently remains unproven. In addition, it is difficult to define a target population for a CDI vaccine, given that the at-risk patient population is largely elderly individuals who typically respond less robustly to vaccination therapies.

SER-109

SER-109 is a bacterial spore ecology consisting of an average of 50 bacterial species derived from healthy donors' fecal matter that is designed to prevent further recurrences of CDI in patients suffering from recurrent CDI by restoring a dysbiotic microbiome to a state of health. In our open label Phase 1b/2 clinical study of SER-109, we evaluated the effect of treatment with SER-109 in patients with three or more occurrences of CDI in a 12-month period. Of the 30 patients enrolled in the trial, 29, or 97%, achieved a clinical cure, which we defined as the absence of CDI requiring antibiotic treatment during the eight-week period after SER-109 dosing. The trial demonstrated that SER-109 is well-tolerated and suggested a favorable safety profile with no serious adverse events considered by the investigators to be attributable to the SER-109 treatment. We also performed an analysis of the microbiome using next-generation sequencing technology and microbiological analysis. These studies demonstrated a re-establishment of keystone organisms and a rapid increase in bacterial diversity, which enable the restoration of the microbiome to a healthy state.

SER-109 is formulated as oral capsules for single-dose administration after completion of antibiotics. A single dose of SER-109 comprises 100 million spores that we anticipate delivering in four small oral capsules. The spores in SER-109 are intended to germinate in the gastrointestinal tract and immediately compete for the same nutrients required by *C. difficile*. The spore forming organisms from SER-109 are also intended to shift the balance of bile acids toward secondary acids that are less efficient for promoting germination of *C. difficile* spores. The following picture is a commercial prototype of a single dose of SER-109 (and is not necessarily a single dose of SER-109 for our Phase 2 clinical study):



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Phase 1b/2 clinical study design

The Phase 1b/2 clinical study was a two part trial designed to evaluate the safety and efficacy of SER-109 in approximately 30 patients with recurrent CDI, defined as three or more occurrences of CDI in the previous 12 months.

Part 1 of the study evaluated a single dose of SER-109 administered orally in 30 capsules over two days, with the dose derived from approximately 75 grams of stool. Part 2 of the study evaluated a single dose of SER-109 administered orally in a range of one to 12 capsules over one day. The dose in Part 2 was based on spore count, as opposed to fecal mass, which is expected to allow for a more precise dosing regimen. The target dose in Part 2 was 1×10^8 spores per dose, which was approximately 17-fold lower than the mean dose in Part 1. The SER-109 doses were derived from seven different healthy human donors. Prior to receiving treatment with SER-109, patients were on antibiotic therapy consisting of either fidaxomicin, vancomycin or metronidazole to control their CDI symptoms. At least 24 hours prior to starting treatment with SER-109, antibiotic therapy was discontinued.

The trial was designed to enroll patients between the ages of 18 and 90 years, with relapsed, laboratory-confirmed CDI with three or more occurrences in the previous 12 months. Enrolled patients must have undergone treatment for CDI with at least three courses of antibiotic therapy in the last 12 months and have a life expectancy of greater than three months. Patients with acute leukemia, recent bone marrow transplant or recent chemotherapy, as well as patients with a history of IBD or IBS with diarrhea, total colectomy or liver cirrhosis were excluded from the trial. The following table identifies patient demographics following enrollment in the trial:

Cohort	Mean Dose (spore units)	Male/Female	Age Median (Range)	Number of CDI Recurrences in Prior 12 months Median (Range)
1	1.7×10^9	5 / 10	71 years (22 – 88)	3 (2 – 6)
2	1.0×10^8	5 / 10	58 years (39 – 83)	3 (2 – 5)

The primary safety measures were an evaluation of adverse events, laboratory values, vital signs and physical examination of findings prior to and after dosing with SER-109 over a 24-week time period. Evaluations occurred by telephone calls, in-home assessments or clinic visits by qualified personnel. Patients were assessed at Days 2 and 4 and Weeks 1, 2, 4, 8 and 24 post-treatment. The primary efficacy measure was the absence of CDI (defined in this study as more than three unformed bowel movements in a 24-hour period with laboratory confirmation of the presence of *C. difficile* toxin in the stool) during the eight weeks after initiating therapy. Eight weeks was selected as the measurement period for the primary endpoint based on our clinical advisory board's experience that a significant majority of CDI recurrences occur within eight weeks. Secondary efficacy measures included minimum effective dose, time to CDI recurrence following SER-109, time without diarrhea during the follow-up period and change in diversity of the colonic microbiome at Day 4 and Weeks 1, 2, 4 and 8 as measured by deep sequencing of patient stool samples. Stool samples were collected pre-treatment and on Day 4 and Weeks 1, 2, 4, 8 and 24 post-treatment.

Phase 1b/2 clinical study results

Efficacy. Twenty-six of 30 patients, or 87% of patients, in the Phase 1b/2 clinical study achieved the primary efficacy endpoint of experiencing no recurrence of CDI during the eight weeks post-treatment. These 26 patients consisted of 13 patients in each of Part 1 and Part 2 of the study. Among the 26 patients was one patient who experienced an initial recurrence on Day 26 and was re-treated, per protocol, with a dose from the same donor. Following re-treatment, this patient also achieved the

primary efficacy endpoint. Efficacy results were not dependent upon the initial human donor or the dose over the range of 3.4×10^7 to 2.3×10^{10} spores.

Of those patients who did not meet the primary efficacy endpoint, one patient had a recurrence of CDI on Day 5 and did not receive a second treatment with SER-109. The three other patients who failed the protocol-defined primary efficacy endpoint were determined by their attending investigator to be recovering from their diarrheal episode by the time they submitted their stool sample for CDI testing. In each case, the investigator advised the patient to refrain from antibiotic use and the patients' condition resolved without antibiotic therapy. All three patients were determined to be clinically CDI free at eight weeks. As a result, the clinical cure rate for the study, which we defined as the absence of CDI requiring antibiotic treatment during the eight-week period after SER-109 dosing, was 97%, or 29 of 30 patients.

We also tested a total of 27 patients at Week 8 for *C. difficile* carriage, where a patient carries the *C. difficile* bacterium but does not experience symptoms related to *C. difficile*. Of the 27 patients tested, 24 patients, or 89% of patients, tested negative for *C. difficile* carriage. Among the three patients who were not tested for *C. difficile* carriage, one patient did not continue with the study to Week 8 and samples were not collected for two patients at Week 8. In addition, 22 patients continued to participate in the Phase 1b/2 clinical study and did not receive additional antibiotics. Of these patients, 21, or 95% of patients, experienced no recurrence of CDI 24 weeks after treatment.

We also performed an analysis of the microbiome using next-generation sequencing technology and microbiological analysis to evaluate long-term changes in the microbiome, including the restoration of bacterial diversity in the colon of patients. These studies demonstrated a rapid increase in bacterial diversity and a restructuring of the microbiome towards a healthy state. Upon introduction, SER-109 appears to engraft its bacterial species into the microbiome, with some of these species persisting in the patient's gastrointestinal tract for at least 24 weeks after dosing. In addition, in some patients we noted the repopulation of organisms that were not in SER-109 and had not been detected in the patient prior to treatment. We believe this phenomenon, which we refer to as augmentation, is an important element for restoration of bacterial diversity and repair of dysbiosis. Engraftment and augmentation, as well as the clinical resolution of CDI, were not dependent on the dose of SER-109 administered.

We believe the engraftment and augmentation observed with SER-109 could have important medical implications for treating other infectious agents. For example, in the Phase 1b/2 clinical study, we observed that some patients were not only infected with *C. difficile*, but were also colonized with other harmful organisms at high levels. Importantly, after SER-109 treatment, levels of these organisms declined by as much as 100,000-fold. For example, we identified multiple patients in the trial with high levels of VRE, which are drug-resistant bacteria that colonize the gastrointestinal tract and can cause serious bloodstream infections. In patients identified with VRE, the VRE was reduced below the limit of detection of our assays after treatment.

Safety. In Part 1 of the study, 80% of the patients experienced at least one adverse event, all of which were treatment emergent adverse events, or TEAEs. A TEAE was defined as an adverse event that started or worsened at or during the time of or after the date of the first dose of SER-109 through the final follow-up visit. Five, or 33%, of the patients were judged by the investigator to have a TEAE attributable to SER-109 and all were mild or moderate. In Part 2, 100% of the patients experienced at least one adverse event, all of which were TEAEs. Nine, or 60%, of the patients were judged by the investigator to have a TEAE attributable to SER-109 and all were mild or moderate. The most common adverse events were gastrointestinal disorders and diarrhea. The majority of TEAEs were mild in severity and consistent with post-antibiotic recovery from CDI. One patient in Part 2 had a severe adverse event of chest pain, which was not considered related to SER-109. Two patients each in Part 1 and Part 2 had more than one serious adverse event, none of which was considered related to SER-109. There were no deaths in Part 1 or Part 2.

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Clinical development plan

We have an IND with the FDA and dosed the first patient in a Phase 2 clinical study of SER-109 in May 2015. We expect study results in the middle of 2016. Following the analysis of the data to come from our Phase 2 clinical study, we plan to meet with the FDA to present Phase 2 safety and efficacy results and a proposed protocol for the Phase 3 clinical trial. We are currently planning to conduct pre-validation studies of our manufacturing process for SER-109, and we expect to obtain sufficient data from these studies for a Phase 3 clinical trial. We plan to initiate the Phase 3 clinical trial in 2016.

The FDA has indicated that we do not need to conduct further pre-clinical studies of SER-109. We believe this conclusion is the result of several factors, including the following:

- gastrointestinal bacteria are host-specific and animal data would not be more representative than our human clinical data;
- SER-109's favorable safety profile in patients in the Phase 1b/2 clinical study;
- ecobiotic microbiome therapeutics are unlikely to result in systemic exposure because they are not absorbed outside of the gastrointestinal tract;
- engraftment of spores is not dependent on dose; and
- SER-109 comprises spores from microbes found in a healthy human gastrointestinal tract.

Taken together, we believe these parameters allow for rapid and inexpensive development relative to typical drug discovery and development.

Phase 2 clinical study design

The Phase 2 clinical study is a randomized, double-blinded, placebo-controlled, parallel-group trial with two treatment arms enrolling a total of 87 patients. We plan to enroll eligible patients at 35 sites in the United States. Patients will be randomized 2:1 to receive either a single oral dose of SER-109 in four capsules or a matching placebo in four capsules. Based on the assumptions we have made for the recurrence rate of CDI and assuming we conduct final analyses for a minimum of 78 patients, our Phase 2 clinical study is sufficiently large, with the power of the study over 90%, to demonstrate that SER-109 is superior to placebo. If our assumptions about the recurrence rate of CDI are incorrect, the power of the Phase 2 clinical study will be affected, and it may be more difficult to show that SER-109 is superior to placebo. In preparation for the clinical study, we have refined the formulation of the inner capsule and changed the manufacturing process to enable production to meet commercial requirements. The manufacturing and formulation changes have resulted in a more pure form of SER-109 that is comparable in potency to that used in the Phase 1b/2 clinical study based on a pre-clinical mouse *C. difficile* model.

The Phase 2 clinical study is designed to enroll patients 18 years or older with a documented history of three or more occurrences of CDI in the previous nine months, as compared to 12 months in our Phase 1b/2 clinical study. Additionally, enrolled patients must have been clinically responsive to ten to 21 days of standard of care antibiotics and show no evidence of diarrhea for two or more consecutive days prior to randomization. In contrast, enrolled patients in our Phase 1b/2 clinical study were permitted to be on long-term antibiotic therapy. Inclusion and exclusion criteria for the Phase 2 clinical study are generally similar to our Phase 1b/2 clinical study, but are more restricted in some patient populations. For example, the criteria exclude patients on steroids or on maintenance immunotherapy and those with a history of untreated celiac disease or gluten enteropathy. However, the inclusion and exclusion criteria for the Phase 2 clinical study is less restrictive in other patient populations. For example, the criteria exclude patients with IBS or IBD only if active within the past 24 months, as compared to patients with any history of these diseases in our Phase 1b/2 clinical study, and patients with an absolute neutrophil count, or ANC, less than 500/mm³, as compared to patients with an ANC less than 1000/mm³ in the Phase 1b/2 clinical study.

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The primary efficacy objective in the Phase 2 clinical study will be to demonstrate the superiority of SER-109 compared to placebo in the prevention of recurrent CDI in adult patients up to eight weeks after treatment. In this study, an episode of recurrent CDI will be defined as three or more unformed stools per day over two days with a positive *C. difficile* stool test and requiring antibiotic treatment. By comparison, our Phase 1b/2 clinical study defined an episode of recurrent CDI as three unformed stools over one day with a positive *C. difficile* stool test and did not require antibiotic treatment. The decision to treat with antibiotics will be based on the physician's clinical assessment of the patient in accordance with the guidelines set forth in our Phase 2 clinical study protocol. The primary safety objective will be to evaluate the safety of SER-109 in these patients up to 24 weeks after treatment as determined by clinical and laboratory safety assessments. During the follow-up period (Weeks 9-12), patients will be contacted by phone weekly and asked about adverse events and diarrheal symptoms. If diarrheal symptoms meeting the definition of recurrent CDI occur during the follow-up period, patients will be asked to return to the clinic for a clinical evaluation and a *C. difficile* test. In addition, patients will return to the clinic at Week 12 for safety evaluations. Following the Week 12 visit, patients will be contacted by phone at Weeks 16, 20 and 24 and asked about adverse events and diarrheal symptoms.

We also plan to evaluate secondary objectives including the time to CDI recurrence, if any, in patients who receive SER-109 compared to those who receive placebo, and the proportion of patients experiencing clinical CDI recurrence up to four, 12 and 24 weeks post-treatment in patients who receive SER-109 compared to placebo. In addition, exploratory objectives include comparing the changes in the composition of the gastrointestinal microbiome from baseline to 24 weeks post-treatment using genomic analysis and measuring quality of life and health outcomes up to 24 weeks post-treatment.

After all enrolled patients complete the Phase 2 clinical study, which will occur 24 weeks following dosing of each patient, or have discontinued before that time point, an analysis of the efficacy and safety endpoints will be performed. Following the analysis of this data, we plan to meet with the FDA to present Phase 2 safety and efficacy results and a proposed protocol for the Phase 3 clinical trial. We plan to initiate the Phase 3 clinical trial in 2016.

Open label extension study. Patients in either arm of the Phase 2 clinical study who relapse and experience an episode of recurrent CDI within eight weeks of treatment will be permitted to enroll in an open label extension study in which they will receive a single dose of SER-109. Participation in the open label extension will be conditioned upon the patient's continued satisfaction of the inclusion and exclusion criteria. We believe that providing the open label extension will assist in facilitating enrollment in the Phase 2 clinical study by providing participants the opportunity to ultimately receive SER-109 if they are initially enrolled in the placebo group. In addition, we believe the open label study will provide additional safety data and may provide us with greater understanding of the impact of a second dose of SER-109.

Manufacturing

SER-109 is a purified ecology of spores produced through a process of extraction from a natural human stool source, obtained from qualified, highly tested donors. The donor raw material is collected in a controlled setting, under a protocol that stringently ensures that donors meet qualification criteria. Donors are required to be in good health, and to possess a medical history and a lifestyle that minimizes the risk of infectious disease transmission. Donors are tested for infectious agents and screened for gastrointestinal and other health factors. After initial qualification, the donor is eligible to donate for a defined period of time, and donors are monitored periodically for health status changes during the donation period. In the middle, and at the end of the donation period, the qualification assessment is repeated to help ensure the donor has maintained their health status. After successful completion of an exit screening the donations are released from quarantine for use in manufacturing.

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We initially process the donor material and then transfer a production intermediate to a contract manufacturing organization, or CMO, to isolate the spores and to concentrate them for conversion to the oral capsule dosage form. The purified, concentrated drug substance is tested for identity, potency and purity, and subsequently formulated and filled into capsules at a controlled potency. The final drug product dosage form is four hard capsules for oral administration. Steps are specifically built into the process to remove and kill non-spore microbes. We are currently planning to conduct pre-validation studies demonstrating the ability of the process to inactivate and clear the potential pathogens of concern, and we expect to obtain sufficient data from these studies for a Phase 3 clinical trial.

Raw materials, intermediates, drug substance and drug product are tested using cGMP assays developed with our know-how to assess the key quality attributes of identity, potency and purity of the natural product. Identity testing has been developed to assure the presence of live spore forms in the product. Potency assays assure the dose of spores, and assess stability of the spores and the product form during storage. Proprietary microbiological purity assays have been developed to enable testing for microbial contaminants in the presence of the live spore product.

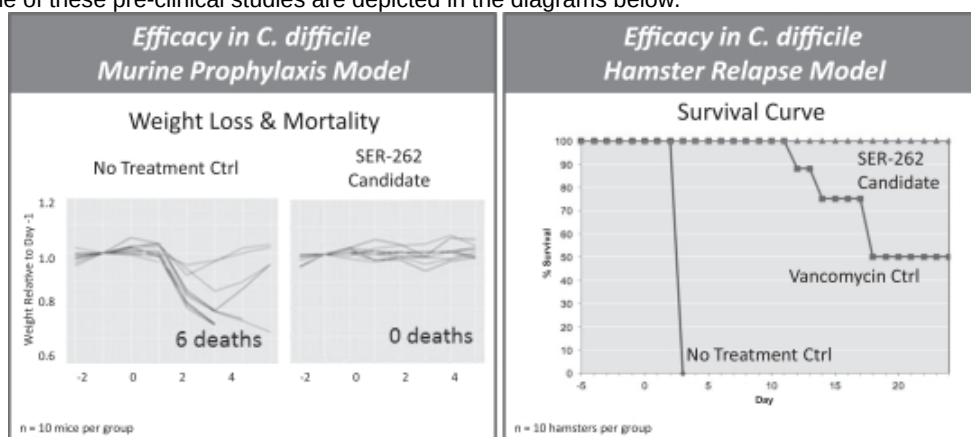
Once ingested, SER-109 spores administered to a patient multiply rapidly within the gastrointestinal tract. Therefore, the dosage required to treat a patient is modest. Moreover, based on the size of the recurrent CDI market, we expect the number of SER-109 doses necessary to meet expected market demand to also be modest. As a result, we believe we can address market demand with a relatively small-scale manufacturing process. Additionally, the need for donors to address anticipated market supply is also modest. If approved, we anticipate that we will be able to produce a sufficient commercial supply of SER-109 to meet estimated demand using donations from fewer than 20 human donors.

SER-262

We are developing SER-262, which is a multi-strain Ecobiotic microbiome therapeutic intended to be used following antibiotic treatment of primary CDI to prevent an initial recurrence of CDI. We are designing SER-262 to increase and improve diversity in the colonic microbiome after antibiotics following CDI. The results of our Phase 1b/2 clinical study of SER-109 provided multiple insights that we are employing in the spore ecology used in SER-262, which consists of a subset of bacteria found in SER-109. Pre-clinical studies of SER-262 candidates have demonstrated efficacy in mouse and hamster models of CDI.

As part of our pre-clinical development of SER-262 we have screened multiple SER-262 candidates for efficacy, compositional optimization and pre-clinical safety in animal models. SER-262 candidates provided significant protection against CDI with reduced mortality, minimum weight loss and clinical score measures of efficacy. Protection was observed using some candidates across a 100-fold dose range with the magnitude of the efficacy signal decreasing at lower doses. Through additional screening of various compositions, we intend to identify an optimal composition of SER-262. We plan to conduct additional mouse and hamster studies as well as conduct further *in vitro* characterization of individual strains, including whole genome sequencing, sporulation efficiency and fermentation requirements in preparation for filing an IND.

The results of some of these pre-clinical studies are depicted in the diagrams below.



We intend to file an IND to initiate clinical studies of SER-262 in the middle of 2016. Each of the strains used in our pre-clinical studies were purified from a qualified donor who participated in the SER-109 Phase 1b/2 clinical study. We believe that the prior clinical use of these strains may ease concerns over their safety in humans and may also limit pre-clinical toxicological studies that might otherwise be required. Additionally, given our ability to grow the spores in bacterial fermenters we will not require any additional donations from human donors for purposes of manufacturing SER-262.

SER-262 represents the continued evolution of our platform and capabilities, validating our ability to extend our technology to new indications. SER-262, unlike SER-109, is made in bacterial fermenters and in a rational *in vitro* design similar to a fixed dose combination of small or large molecules. We intend to use this approach going forward for future Ecobiotic microbiome therapeutics, which will eliminate the need for ongoing human donors in the CMC process.

Manufacturing

To manufacture SER-262, bacterial components for formulation will be fermented and purified as spores. The bacterial components will originate from cGMP master cell banks that will be manufactured and released starting from proprietary research cell banks. Research cell banks have been made for each strain by clonal isolation and multiple rounds of purification, followed by banking. We expect these banks will be ready for transfer to cGMP manufacturing for master cell banking following testing for identity and microbiological purity. The strains have been cultured in controlled fermentations with above-target yields on average to meet projected initial clinical testing needs. Optimization is on-going to define cultivation conditions that promote spore formation. We expect that subsequent purification processing, and formulation chemistries and processes, will enable final drug products containing both purified spores and combinations of spores with vegetative bacteria.

Other Product Candidates and Products in Discovery

SER-287

We have an active pre-clinical program to develop an Ecobiotic microbiome therapeutic for IBD, including ulcerative colitis. Consistent with our approach to rational drug design, we based this program on clinical observations and hypotheses about the role of a dysbiotic microbiome as the proximal cause of disease.

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Recent published third-party research reported changes in the microbiome in a cohort of patients with IBD, including ulcerative colitis, compared to healthy individuals. The changes include higher levels of *Enterobacteriaceae* and lower levels of *Clostridiales*. The changes in these organisms are a form of dysbiosis, and we believe that if we can repopulate keystone organisms and functional pathways we could restore the microbiome thereby treating ulcerative colitis.

Based on this research and our experience with SER-109, we believe that we can use a complex spore ecology to restore the underlying dysbiosis of ulcerative colitis. SER-109 is comprised of organisms in the class of *Clostridiales*, which engraft after treatment with SER-109. SER-109 has also been shown to reduce the colonization of *Enterobacteriaceae* in CDI patients. We are developing SER-287 to treat ulcerative colitis. To derive SER-287, we will use data generated in our studies of SER-109. We are currently researching SER-287 and anticipate initiating a Phase 1b proof-of-concept clinical trial for SER-287 for ulcerative colitis by the end of 2015.

SER-155

We have an active pre-clinical program to develop Ecobiotic microbiome therapeutics for other infectious diseases. The Phase 1b/2 clinical study of SER-109 provided initial evidence suggesting that Ecobiotic microbiome therapeutics have the potential to eliminate colonization by microbial pathogens, such as VRE and Gram-negative *Enterobacteriaceae*. *Enterobacteriaceae*, such as *Klebsiella*, *Morganella* and *Proteus*, normally are present at low levels in the healthy colon, but like *C. difficile*, they can overgrow after antibiotic use. *Enterobacteriaceae* can include multidrug resistant organisms, or MDROs, that represent significant public health concerns. For example, carbapenem resistant *Enterobacteriaceae*, or CRE, is a significant problem in the United States. VRE, CRE and other MDROs colonize the gastrointestinal tract after antibiotic use and can spread through contact with patients and healthcare workers both in institutional and in community settings.

We are currently designing and developing SER-155, an Ecobiotic microbiome therapeutic that is expected to have activity against Gram-positive and Gram-negative enteric bacterial pathogens. We expect SER-155 to be used for the treatment of antibiotic-resistant bacteria to eliminate colonization and prevent infection. The selection of indication will be based on pre-clinical screening efforts, and the assessment of clinical development plan, regulatory path and market opportunities. We plan to conduct additional mouse and hamster studies as well as conduct further *in vitro* characterization of individual strains, including whole genome sequencing, sporulation efficiency and fermentation requirements in preparation for filing an IND.

Sales and Marketing

In light of our stage of development, we have not yet established a commercial organization. If SER-109 is approved in the United States, we plan to commercialize it with our own focused specialty sales force. We believe we can effectively commercialize SER-109 with a commercial team of 100 or fewer sales representatives that will target gastrointestinal and infectious disease physicians, which are the two primary groups of physicians who treat multiple recurrent CDI patients.

In addition, we expect to utilize a variety of types of collaboration, distribution and other marketing arrangements with one or more third parties to commercialize SER-109 and SER-262 in markets outside the United States.

Manufacturing

The production of live bacterial products is highly specialized. Owing to their hardiness and environmental persistence, production of spore-forming organisms poses unique considerations for product, personnel and facility protection. Manufacturing activities with spores are subject to additional regulations. We believe that many of the challenges associated with manufacturing bacterial combinations are overcome by the low dose requirements of our product. For example, we expect that a typical fermentation will yield thousands of doses per liter. Additionally, because a given total dose is split between several strains, the per-strain requirements for production may be even lower. As a result, we believe the high productivity relative to the dose level will enable production scales for both clinical and commercial supply to be modest.

We have developed a supply chain for producing and testing materials to ensure the availability of future clinical trial supplies. Our development processes are designed to provide that all raw materials, process technologies and analytical tests we use are scalable and transferable to a cGMP manufacturing environment. These include the following core elements:

- *Fermentation.* We believe that microscale screening is possible for optimization of the bacterial cultures of interest in our current and foreseeable candidates. These screens will focus a given strain on the fermentation platform that is best-suited for optimization and scale-up. Small-scale fermentation systems (0.1 L to 20 L) enable the optimization of a wide variety of culture conditions and have been demonstrated to be scalable to commercial fermentation processes and enable technology transfer to clinical and final manufacturing scales. We employ platform fermentation processes as starting conditions for cGMP production schemes, and when required, will develop strain specific process parameters. To develop master cell banks and bulk drug substance for commercial product, we plan to use bacterial strains originating from the research cell bank, so we expect the research cell banks and final drug product will be genetically and physiologically similar.
- *Purification.* Similar to fermentation, we believe small-scale purification, formulation, filling and dosage preparation operations are available to complete bench-scale manufacturing and/or spores, which quickly assess the final process yield, quality and robustness.
- *Formulation.* Our Ecobiotic microbiome therapeutics are combinations of live bacteria and can be administered by a number of methods and by different routes. The primary goal in developing formulation is to deliver the bacteria to the intended location in a condition where they are able to replicate and correct dysbiosis. Formulation development will generally use approved excipients and preservatives, and will include screening of both liquid and solid formulations to maximize the opportunity for extended stability with minimal cold-chain requirements.
- *Analytical.* We intend to address quality control requirements for our Ecobiotic microbiome therapeutics using proprietary microbiological and sequence-based testing schemes. We have available and are further developing quality control and in-process analytical tools that can quantitatively measure the composition of spore, vegetative microbe and spore/vegetative combinations, which we believe enable a wide variety of drug substances to be manufactured. Throughout the bioprocess and formulation development platform we plan to use high-throughput quantitative analytics to assess the identity, potency and purity of the final product.

We currently have a pilot manufacturing facility at our Cambridge location where we conduct process development, scale-up activities and a portion of the cGMP manufacture of Ecobiotic microbiome therapeutics. We currently intend to establish a manufacturing facility for our product candidates for production at a commercial scale which we may do by expanding our current facility or building additional facilities.

Intellectual Property

We strive to protect the proprietary technology that we believe is important to our business, including seeking and, if granted, maintaining patents intended to cover our product candidates and compositions, their methods of use and processes for their manufacture and any other aspects of inventions that are commercially important to the development of our business. We also rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

We plan to continue to expand our intellectual property estate by filing patent applications directed to compositions, methods of treatment, methods of manufacture and methods for patient selection created or identified from our ongoing development of our product candidates. Our success will depend on our ability to obtain and maintain patent and other proprietary protection for commercially important technology, inventions and know-how related to our business, defend and enforce any patents that we may obtain, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and proprietary rights of third parties. We also rely on know-how and continuing technological innovation to develop and maintain our proprietary position and, in the future, may rely on or leverage in-licensing opportunities. We seek to obtain domestic and international patent protection, and endeavor to promptly file patent applications for new commercially valuable inventions.

The patent positions of biopharmaceutical companies like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent may be challenged in courts after issuance. Moreover, many jurisdictions permit third parties to challenge issued patents in administrative proceedings, which may result in further narrowing or even cancellation of patent claims. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or at all, whether the claims of any patent applications, should they issue, will cover our product candidates, or whether the claims of any issued patents will provide sufficient protection from competitors or otherwise provide any competitive advantage.

Because patent applications in the United States and certain other jurisdictions are maintained in secrecy for 18 months or potentially even longer, and because publication of discoveries in the scientific or patent literature often lags behind actual discoveries and patent application filings, we cannot be certain of the priority of inventions covered by pending patent applications. Accordingly, we may not have been the first to invent the subject matter disclosed in some of our patent applications or the first to file patent applications covering such subject matter, and we may have to participate in interference proceedings or derivation proceedings declared by the United States Patent and Trademark Office, or USPTO, to determine priority of invention.

Our patent portfolio includes patent applications in the early stages of prosecution and three issued patents. For our pending applications, we anticipate determining, in advance of the applicable deadlines, whether to pursue these applications and if so will pursue them in the United States and selected ex-U.S. jurisdictions. Substantive patent prosecution before the USPTO was begun in four applications from two patent families, and three of these have issued as patents. We believe that issued claims will provide protection for SER-109, SER-262, SER-287 and SER-155.

Our patent estate leverages both offensive and defensive strategies. As of May 27, 2015, we owned a total of nine patent application families that include Patent Cooperation Treaty, or PCT, applications and/or U.S. patent applications, and some of these families are described briefly below. We also own two additional patent application families that include only U.S. provisional applications that will not themselves be examined and for which the deadline to file PCT applications and/or U.S.

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non-provisional applications has not yet expired. The pending patent applications as of May 27, 2015 in six of the patent application families in our portfolio are described briefly below. We expect to pursue additional applications in these families over time.

- A family related to binary combinations of microbes that includes the following issued and pending applications: (i) an issued U.S. patent, which claims therapeutic compositions that include selected binary combinations of microbes; (ii) an issued U.S. patent, which claims methods of using such compositions to treat or prevent CDI; (iii) a continuation U.S. patent application and (iv) a PCT application claiming similar methods and compositions. We have initiated the filing of national stage applications based on this PCT application in 11 ex-U.S. jurisdictions. Patents issuing from or based on these applications, if any, are expected to expire in 2033, assuming all required maintenance fees are paid and absent any applicable patent term extension or patent term adjustment. We expect this patent application family to provide patent protection for SER-109, SER-262, SER-287 and SER-155.
- A family related to combinations of bacterial spores that includes the following issued and pending applications: (i) one issued U.S. patent and one U.S. application that claim certain methods of treatment of gastrointestinal diseases, including Crohn's disease and colitis, using combinations of bacterial spores and (ii) a PCT application claiming similar methods, as well as related compositions. The time period for electing to pursue foreign patent protection by filing national stage applications in individual jurisdictions based on this PCT application has not yet expired, and we will need to decide whether and where to pursue ex-U.S. protection before expiration of the applicable deadlines. Patents issuing from or based on these applications, if any, are expected to expire in 2034, assuming all required maintenance fees are paid and absent any applicable patent term extension or patent term adjustment. We expect this patent application family to provide patent protection for SER-109, SER-262, SER-287 and SER-155.
- A family that includes a pending PCT application related to compositions of matter and methods for new combinations of microbes for treating gastrointestinal diseases. The time period for electing to pursue US and foreign patent protection by filing national stage applications in individual jurisdictions based on this PCT application has not yet expired, and we will need to decide whether and where to pursue U.S. and ex-U.S. protection before expiration of the applicable deadlines. If we do pursue protection in one or more jurisdictions, patents based on this application, if granted, are expected to expire in 2034, assuming all required maintenance fees are paid and absent any applicable patent term extension or patent term adjustment.
- A family that includes a pending PCT application related to Ecobiotic quality control and characterization methods. The time period for electing to pursue U.S. and foreign patent protection by filing national stage applications in individual jurisdictions based on this PCT application has not yet expired, and we will need to decide whether and where to pursue US and ex-US protection before expiration of the applicable deadlines. If we do pursue protection in one or more jurisdictions, patents based on this application, if granted, are expected to expire in 2034, assuming all required maintenance fees are paid and absent any applicable patent term adjustment.
- A family that includes a pending PCT application related to methods of restructuring of a host microbiome using microbial populations identified using our network-based discovery platforms. The time period for electing to pursue U.S. and foreign patent protection by filing national stage applications in individual jurisdictions based on this PCT application has not yet expired, and we will need to decide whether and where to pursue U.S. and ex-U.S. protection before expiration of the applicable deadlines. If we do pursue protection in one or more jurisdictions, patents based on this application, if granted, are expected to expire in 2034, assuming all required maintenance fees are paid.

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• A family that includes a pending PCT application related to compositions of matter and methods of treating disorders with compositions that include, for example, ternary combinations of microbes. The time period for electing to pursue U.S. and foreign patent protection by filing national stage applications in individual jurisdictions based on this PCT application has not yet expired, and we will need to decide whether and where to pursue U.S. and ex-U.S. protection before expiration of the applicable deadlines. If we do pursue protection in one or more jurisdictions, patents based on this application, if granted, are expected to expire in 2034, assuming all required maintenance fees are paid and absent any applicable patent term extension or patent term adjustment.

Patent term

The base term of a U.S. patent is 20 years from the filing date of the earliest-filed non-provisional, patent application from which the patent claims priority. The term of a U.S. patent can be lengthened by patent term adjustment, which compensates the owner of the patent for administrative delays at the USPTO. In some cases, the term of a U.S. patent is shortened by terminal disclaimer that reduces its term to that of an earlier-expiring patent.

The term of a U.S. patent may be eligible for patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act, to account for at least some of the time the drug is under development and regulatory review after the patent is granted. With regard to a drug for which FDA approval is the first permitted marketing of the active ingredient, the Hatch-Waxman Act allows for extension of the term of one U.S. patent that includes at least one claim covering the composition of matter of such an FDA-approved drug, an FDA-approved method of treatment using the drug and/or a method of manufacturing the FDA-approved drug. The extended patent term cannot exceed the shorter of five years beyond the non-extended expiration of the patent or fourteen years from the date of the FDA approval of the drug, and a patent cannot be extended more than once or for more than a single product. During the period of extension, if granted, the scope of exclusivity is limited to the approved product for approved uses. Some foreign jurisdictions, including Europe and Japan, have analogous patent term extension provisions, which allow for extension of the term of a patent that covers a drug approved by the applicable foreign regulatory agency. In the future, if and when our product candidates receive FDA approval, we expect to apply, if appropriate, for patent term extension on patents covering those product candidates, their methods of use and/or methods of manufacture.

Trade secrets

In addition to patents, we rely on trade secrets and know-how to develop and maintain our competitive position. We typically rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. We protect trade secrets and know-how by establishing confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements provide that all confidential information developed or made known during the course of an individual or entities' relationship with us must be kept confidential during and after the relationship. These agreements also provide that all inventions resulting from work performed for us or relating to our business and conceived or completed during the period of employment or assignment, as applicable, shall be our exclusive property. In addition, we take other appropriate precautions, such as physical and technological security measures, to guard against misappropriation of our proprietary information by third parties.

Competition

The development and commercialization of new drug and biologic products is highly competitive and is characterized by rapid and substantial technological development and product innovations. We face competition with respect to our current product candidates, and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. We are aware of a number of large pharmaceutical and biotechnology companies, including Merck, Shire, Sanofi, Pfizer and Novartis, as well as smaller, early-stage companies, that are pursuing the development of products, including microbiome therapeutics, for the prevention of CDI and other disease indications we are targeting. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others may be based on entirely different approaches. For example, FMT is a procedure that has resulted in high cure rates for recurrent CDI and our competitors and physicians may continue to seek to standardize and implement this procedure. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources, established presence in the market and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors.

These third parties compete with us in recruiting and retaining qualified scientific, sales and marketing and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

The key competitive factors affecting the success of SER-109 and any other product candidates that we develop, if approved, are likely to be their efficacy, safety, convenience, price, the level of competition and the availability of reimbursement from government and other third-party payors.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market, especially for any competitor developing a microbiome therapeutic which will likely share our same regulatory approval requirements. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of lower cost products.

Government Regulation

The FDA and other regulatory authorities at federal, state and local levels, as well as in foreign countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring and post-approval reporting of drugs and biologics such as those we are developing. We, along with our contract manufacturers, will be required to navigate the various pre-clinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies

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or seek approval for our product candidates. The process of obtaining regulatory approvals and ensuring subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources.

In the United States, the FDA regulates drug and biologic products under the Federal Food, Drug and Cosmetic Act, its implementing regulations and other laws, including, in the case of biologics, the Public Health Service Act. Our product candidates are subject to regulation by the FDA as biologics. Biologics require the submission of a biologics license application, or BLA, and approval by the FDA before being marketed in the United States. None of our product candidates has been approved by the FDA for marketing in the United States, and we currently have no BLAs pending. If we fail to comply with applicable FDA or other requirements at any time during product development, clinical testing, the approval process or after approval, we may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, suspension or revocation of approved applications, warning letters, product recalls, product seizures, total or partial suspensions of manufacturing or distribution, injunctions, fines, civil penalties or criminal prosecution. Any FDA enforcement action could have a material adverse effect on us.

The process required by the FDA before our biologic product candidates may be marketed in the United States generally involves the following:

- completion of pre-clinical laboratory tests and animal studies performed in accordance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND, which must become effective before clinical trials in the United States may begin;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication, conducted in accordance with the FDA's good clinical practice, or GCP, regulations;
- submission to the FDA of a BLA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with cGMP regulations; and
- FDA review and approval of the BLA prior to any commercial marketing, sale or shipment of the product.

The testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all.

Pre-clinical and Clinical Trials

Once a product candidate is identified for development, it enters the pre-clinical testing stage. Pre-clinical studies include laboratory evaluations of drug chemistry, formulation and stability, as well as studies to evaluate toxicity in animals, which must be conducted in accordance with GLP requirements. The results of the pre-clinical studies, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Submission of an IND may result in the FDA not allowing clinical trials to commence or not allowing clinical trials to commence on the terms

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originally specified in the IND. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development, and the FDA must grant permission, either explicitly or implicitly by not objecting, before each clinical trial can begin.

Clinical trials involve the administration of the product candidate to human subjects under the supervision of qualified investigators. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial and the parameters and criteria to be used in monitoring safety and evaluating effectiveness. Each protocol must be submitted to the FDA as part of the IND. An independent institutional review board, or IRB, for each medical center proposing to participate in a clinical trial must also review and approve the clinical trial before it can begin at that center, and the IRB must monitor the clinical trial until it is completed. The FDA, the IRB, or the sponsor may suspend or discontinue a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk. Clinical testing also must satisfy extensive GCP requirements, including requirements for informed consent.

For purposes of BLA approval, clinical trials are typically conducted in three sequential phases, which may overlap or be combined.

- *Phase 1* — Phase 1 clinical trials involve initial introduction of the investigational product into healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- *Phase 2* — Phase 2 clinical trials involve administration of the investigational product to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks.
- *Phase 3* — Phase 3 clinical trials involve administration of the investigational product to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for product approval.

In some cases, the FDA may condition approval of a BLA on the sponsor's agreement to conduct additional clinical trials to further assess the biologic's safety and effectiveness after BLA approval. Such post-approval clinical trials are typically referred to as Phase 4 clinical trials.

Although most clinical research performed in the United States in support of a BLA must be authorized in advance by the FDA, under the IND regulations and procedures described above, there are certain circumstances under which clinical trials can be conducted without submission of an IND. For example, a sponsor who wishes to conduct a clinical trial outside the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. Similarly, the FDA may exercise enforcement discretion to permit sponsors to conduct certain types of clinical investigations without an IND. Pursuant to the FDA guidance document "Enforcement Policy Regarding Investigational New Drug Requirements for Use of Fecal Microbiota for Transplantation to Treat *Clostridium difficile* Infection Not Responsive to Standard Therapies" (July 2013), the FDA currently exercises enforcement discretion regarding the IND requirements for the use of FMT to treat CDI not responsive to standard therapies, provided that the treating physician obtains adequate informed consent from the patient or his or her legally authorized representative for the use of FMT products. The FDA provided confirmation that it intends to exercise enforcement discretion with respect to our Phase 1b/2 clinical study of SER-109, a modified FMT product, and accordingly, we did not conduct

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this trial under an IND. However, the guidance document states that the FDA will continue to work with any sponsors who wish to submit INDs for this use of FMT, and we intend to conduct all future clinical studies of SER-109, including our Phase 2 clinical study and our planned Phase 3 clinical trial, under an IND.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the biologic and finalize a process for manufacturing the biologic in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and manufacturers must develop, among other things, methods for testing the identity, strength, quality and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

BLA Submission and FDA Review

The results of pre-clinical studies and clinical trials, together with other detailed information, including extensive manufacturing information and information on the composition of the biologic, are submitted to the FDA in the form of a BLA requesting approval to market the biologic for one or more specified indications. The submission of a BLA requires payment of a substantial user fee unless a waiver is granted. Each BLA submitted to the FDA is reviewed for administrative completeness and reviewability within 60 days of the FDA's receipt of the application. If the BLA is found to be complete, the FDA will file the BLA, triggering a full review of the application. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission.

Once a BLA has been accepted for filing, by law the FDA has 180 days to review the application and respond to the applicant. However, the review process is often significantly extended by FDA requests for additional information or clarification. Under the Prescription Drug User Fee Act, the FDA has a goal of reviewing BLAs within ten months of the 60-day filing date for standard review or six months for priority review, but the overall timeframe is often extended by FDA requests for additional information or clarification. The FDA reviews a BLA to determine, among other things, whether the biological product is safe, pure and potent and whether the facility or facilities in which it is manufactured meet standards designed to assure the product's continued safety, purity and potency. The FDA may refer the application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. Before approving a BLA, the FDA will inspect the facility or the facilities at which the biologic product is manufactured, and will not approve the product unless cGMP compliance is satisfactory. The FDA may also inspect the sites at which the clinical trials were conducted to assess their compliance with GCP requirements, and will not approve the biologic unless compliance with such requirements is satisfactory.

The FDA may deny approval of a BLA if the applicable statutory and regulatory criteria are not satisfied, or it may require additional pre-clinical or clinical data. Even if such data are submitted, the FDA may ultimately decide that the BLA does not satisfy the criteria for approval. Data from clinical trials are not always conclusive and the FDA may interpret data differently than sponsors. Once the FDA approves a BLA, such approval may limit the indicated uses for which the biologic may be marketed. The FDA may also require implementation of a Risk Evaluation and Mitigation Strategy, or REMS, which can include a medication guide, communication plan, or elements to assure safe use, such as restricted distribution methods, physician training, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling claims or the development of adequate controls and specifications. Once approved, the FDA may

withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the market. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization, and may limit further marketing based on the results of these post-marketing studies.

The biologic testing and approval processes require substantial time, effort and financial resources, and each may take several years to complete. The FDA may not grant approval on a timely basis, or at all. Even if we believe a clinical trial has demonstrated safety and efficacy of one of our product candidates for the treatment of a disease or condition, the results may not be satisfactory to the FDA. Pre-clinical and clinical data may be interpreted by the FDA in different ways, which could delay, limit or prevent regulatory approval. We may encounter difficulties or unanticipated costs in our efforts to secure necessary governmental approvals which could delay or preclude us from marketing our product candidates. The FDA may limit the indications for use or place other conditions on any approvals that could restrict the commercial application of our products. After approval, certain changes to the approved biologic, such as adding new indications, manufacturing changes or additional labeling claims, are subject to further FDA review and approval. Depending on the nature of the change proposed, a BLA supplement must be filed and approved before the change may be implemented. For many proposed post-approval changes to a BLA, the FDA has up to 180 days to review the application. As with new BLAs, the review process is often significantly extended by the FDA requests for additional information or clarification.

Expedited Development and Review Programs

The FDA maintains several programs intended to facilitate and expedite development and review of new drugs and biologics to address unmet medical needs in the treatment of serious or life-threatening diseases or conditions. These programs include fast track designation, breakthrough therapy designation, priority review designation and accelerated approval, and the purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures.

A new drug or biologic is eligible for fast track designation if it is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address unmet medical needs for such a disease or condition. Fast track designation provides increased opportunities for sponsor meetings with the FDA during pre-clinical and clinical development, in addition to the potential for rolling review once a marketing application is filed. In addition, a new drug or biologic may be eligible for breakthrough therapy designation if it is intended to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Breakthrough therapy designation provides all the features of fast track designation in addition to intensive guidance on an efficient drug development program beginning as early as Phase 1, and FDA organizational commitment to expedited development, including involvement of senior managers and experienced review staff in a cross-disciplinary review, where appropriate.

Any product submitted to the FDA for approval, including a product with fast track or breakthrough therapy designation, may also be eligible for additional FDA programs intended to expedite the review process, including priority review designation and accelerated approval. A product is eligible for priority review if it has the potential to provide a significant improvement in safety or effectiveness in the treatment, diagnosis or prevention of a serious disease or condition. The FDA aims to review applications for new products designated for priority review within six months, compared to ten months under standard review. Additionally, products intended to treat serious or life-threatening

diseases or conditions may receive accelerated approval. Products are eligible for accelerated approval if they can be shown to have an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or an effect on a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality which is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Accelerated approval is usually contingent on a sponsor's agreement to conduct additional post-approval studies to verify and describe the product's clinical benefit. In addition, the FDA currently requires, as a condition for accelerated approval, pre-approval of all promotional materials intended for dissemination or publication within 120 days following marketing approval, which could adversely impact the timing of commercial launch of the product.

Fast track designation, breakthrough therapy designation, priority review designation and accelerated approval do not change the standards for approval but may expedite the development or approval process. We may apply for one or more of the FDA's expedited programs for our product candidates. The FDA may disagree that our product candidates satisfy the criteria for such programs, or such programs may fail to ultimately result in expedited development or approval timelines.

Post-Approval Requirements

Approved biologics that are manufactured or distributed in the United States are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product distribution, advertising and promotion and reporting of adverse experiences with the product. There also are continuing, annual user fee requirements for products and the establishments at which such products are manufactured, as well as new application fees for certain supplemental applications.

Any biologics manufactured or distributed by us or our contract manufactures pursuant to FDA approvals would be subject to continuing regulation by the FDA, including recordkeeping requirements and reporting of adverse experiences associated with the product. Manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMP, which impose certain procedural and documentation requirements upon us and our contract manufacturers. Failure to comply with statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, product seizures, injunctions, civil penalties or criminal prosecution. We cannot be certain that we or our present or future third-party manufacturers or suppliers will be able to comply with the cGMP regulations and other ongoing FDA regulatory requirements. If we or our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, require us to recall a product from distribution or withdraw approval of the BLA for that product.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information, requirements for post-market studies or clinical trials to assess new safety risks, or imposition of distribution or other restrictions under a REMS. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;

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- refusal of the FDA to approve applications or supplements to approved applications, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the post-approval marketing and promotion of biologics, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities, and promotional activities involving the internet and social media. A company can make only those claims relating to safety and efficacy that are approved by the FDA. Physicians may prescribe legally available biologics for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, impose stringent restrictions on manufacturers' communications regarding off-label use. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties.

Biosimilars

We believe that any of our product candidates approved under a BLA should qualify for a 12-year period of exclusivity against biosimilar competition currently permitted by the Biologics Price Competition and Innovation Act, or BPCIA. Specifically, as part of the Patient Protection and Affordable Care Act enacted in 2010, as amended by the Health Care and Education Affordability Reconciliation Act, collectively the Affordable Care Act, the BPCIA established an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The new abbreviated regulatory pathway provides legal authority for the FDA to review and approve biosimilar biologics based on their similarity to an existing brand product, referred to as a reference product, including the possible designation of a biosimilar as interchangeable with a brand product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the original brand product was approved under a BLA. There is a risk that, as proposed by President Obama, Congress could amend the BPCIA to significantly shorten this exclusivity period or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for biosimilar competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological drug products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing. The BPCIA is complex and is only beginning to be interpreted and implemented by the FDA. As a result, its ultimate impact, implementation and meaning is subject to uncertainty. While it is uncertain when any such processes may be fully adopted by the FDA, any such processes that operate to limit the scope or length of exclusivity afforded by the BPCIA could have a material adverse effect on the future commercial prospects for our biological products. In addition, the period of exclusivity provided by the BPCIA only operates against third parties seeking approval via the abbreviated pathway, but would not prevent third parties from pursuing approval via the traditional approval pathway. In addition, foreign regulatory authorities may also provide for exclusivity periods for approved biological products. For example, biological products in the European Union may be eligible for at least a ten-year period of exclusivity.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there

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is no reasonable expectation that the cost of developing and making the product available in the United States for the disease or condition will be recovered from sales of the product. Orphan designation must be requested before submitting a BLA. Orphan designation does not convey any advantage in or shorten the duration of the regulatory review and approval process, though companies developing orphan products are eligible for certain incentives, including tax credits for qualified clinical testing and waiver of application fees.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to a seven-year period of marketing exclusivity during which the FDA may not approve any other applications to market the same therapeutic agent for the same indication, except in limited circumstances, such as a subsequent product's showing of clinical superiority over the product with orphan exclusivity. Competitors, however, may receive approval of different therapeutic agents for the indication for which the orphan product has exclusivity or obtain approval for the same therapeutic agent for a different indication than that for which the orphan product has exclusivity. Orphan product exclusivity could block the approval of one of our products for seven years if a competitor obtains approval for the same therapeutic agent for the same indication before we do, unless we are able to demonstrate that our product is clinically superior. Further, if a designated orphan product receives marketing approval for an indication broader than the rare disease or condition for which it received orphan designation, it may not be entitled to orphan exclusivity.

We may seek orphan designation for one or more of our product candidates, but the FDA may disagree with our analysis of the prevalence of a disease or condition or other criteria for designation and refuse to grant orphan status. We cannot guarantee that we will obtain designation or approval for any product candidate, or that we will be able to secure orphan product exclusivity if we do obtain approval.

Other Healthcare Laws

Although we currently do not have any products on the market, if our product candidates are approved and we begin commercialization, we will be subject to healthcare regulation and enforcement by the federal government and the states in which we conduct our business. These laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security and physician sunshine laws and regulations.

The federal Anti-Kickback Statute prohibits the offer, receipt, or payment of remuneration in exchange for or to induce the referral of patients or the use of products or services that would be paid for in whole or part by Medicare, Medicaid or other federal healthcare programs. Remuneration has been broadly defined to include anything of value, including cash, improper discounts and free or reduced price items and services. The government has enforced the Anti-Kickback Statute to reach large settlements with healthcare companies based on sham research or consulting and other financial arrangements with physicians. Further, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act (discussed below). Many states have similar laws that apply to their state healthcare programs as well as private payors.

The False Claims Act, or FCA, imposes liability on persons who, among other things, present or cause to be presented false or fraudulent claims for payment by a federal health care program. The FCA has been used to prosecute persons submitting claims for payment that are inaccurate or fraudulent, that are for services not provided as claimed, or for services that are not medically necessary. Actions under the FCA may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. Violations of the FCA can result in significant

monetary penalties and treble damages. The federal government is using the FCA, and the accompanying threat of significant liability, in its investigation and prosecution of pharmaceutical and biotechnology companies throughout the country, for example, in connection with the promotion of products for unapproved uses and other sales and marketing practices. The government has obtained multi-million and multi-billion dollar settlements under the FCA in addition to individual criminal convictions under applicable criminal statutes. In addition, companies have been forced to implement extensive corrective action plans, and have often become subject to consent decrees or corporate integrity agreements, severely restricting the manner in which they conduct their business. Given the significant size of actual and potential settlements, it is expected that the government will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

In addition, there has been a recent trend of increased federal and state regulation of payments made to physicians and other healthcare providers. The Affordable Care Act, among other things, imposed new reporting requirements on drug manufacturers for payments made by them to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Failure to submit required information may result in civil monetary penalties of up to an aggregate of \$150,000 per year (or up to an aggregate of \$1 million per year for "knowing failures"), for all payments, transfers of value or ownership or investment interests that are not timely, accurately and completely reported in an annual submission. Drug manufacturers were required to begin collecting data on August 1, 2013 and submit reports on aggregate payment data to the government for the first reporting period (August 1, 2013 – December 31, 2013) by March 31, 2014, and to report detailed payment data for the first reporting period and submit legal attestation to the accuracy of such data by June 30, 2014. Thereafter, drug manufacturers must submit reports by the 90th day of each subsequent calendar year. Certain states also mandate implementation of compliance programs, impose restrictions on drug manufacturer marketing practices and/or require the tracking and reporting of gifts, compensation and other remuneration to physicians.

We may also be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and their respective implementing regulations, including the final omnibus rule published on January 25, 2013, imposes specified requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's privacy and security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

The shifting commercial compliance environment and the need to build and maintain robust systems to comply with different compliance and/or reporting requirements in multiple jurisdictions increase the possibility that a healthcare company may violate one or more of the requirements. If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

Coverage and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In both domestic and foreign markets, sales and reimbursement of any approved products will depend, in part, on the extent to which third-party payors, such as government health programs, commercial insurance and managed healthcare organizations provide coverage, and establish adequate reimbursement levels for, such products. Third-party payors are increasingly challenging the prices charged for medical products and services and imposing controls to manage costs. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the FDA-approved products for a particular indication. Additionally, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. If third-party payors do not consider our products to be cost-effective compared to other therapies, the payors may not cover our products as a benefit under their plans or, if they do, the level of reimbursement may not be sufficient to allow us to sell our products on a profitable basis.

The containment of healthcare costs also has become a priority of federal and state governments and the prices of drugs have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results.

Outside the United States, ensuring adequate coverage and payment for our products will face challenges. Pricing of prescription pharmaceuticals is subject to governmental control in many countries. Pricing negotiations with governmental authorities can extend well beyond the receipt of regulatory marketing approval for a product and may require us to conduct a clinical trial that compares the cost effectiveness of our product candidates or products to other available therapies. Conducting such a clinical trial could be expensive and result in delays in our commercialization efforts. Third-party payors are challenging the prices charged for medical products and services, and many third-party payors limit reimbursement for newly approved healthcare products. Recent budgetary pressures in many countries are also causing governments to consider or implement various cost-containment measures, such as price freezes, increased price cuts and rebates. If budget pressures continue, governments may implement additional cost-containment measures. Cost-control initiatives could decrease the price we might establish for products that we may develop or sell, which would result in lower product revenues or royalties payable to us. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products.

Healthcare Reform

In the United States, there have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical and biological products, government control and other changes to the healthcare system. It is uncertain what legislative proposals will be adopted or what actions federal, state or private payors for medical goods and services may take in response to any healthcare reform proposals or legislation. We cannot predict the effect medical or healthcare reforms may have on our business, and no assurance can be given that any such reforms will not have a material adverse effect.

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By way of example, in March 2010, the Affordable Care Act was signed into law, which, among other things, includes changes to the coverage and payment for drug products under government health care programs. Among other things, the Affordable Care Act:

- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices;
- extended Medicaid drug rebates, previously due only on fee-for-service utilization, to Medicaid managed care utilization, and created an alternate rebate formula for new formulations of certain existing products that is intended to increase the amount of rebates due on those drugs;
- expanded the types of entities eligible for the 340B drug discount program that mandates discounts to certain hospitals, community centers and other qualifying providers. With the exception of children's hospitals, these newly eligible entities will not be eligible to receive discounted 340B pricing on orphan drugs. In addition, because 340B pricing is determined based on AMP and Medicaid drug rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discounts to increase; and
- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50% point-of-sale-discount off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013 and, due to subsequent legislative amendments, will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several providers, including hospitals. Adoption of other new legislation at the federal or state level could further limit reimbursement for pharmaceuticals, including our product candidates if approved.

Employees

As of May 13, 2015, we had 44 full-time permanent employees. Eleven employees work in administration and operations and 33 work in research and development.

Facilities

Research and Offices

Our corporate headquarters are located in Cambridge, Massachusetts, where we currently sublease approximately 7,461 square feet of office space under a sublease that expires in February 2016. We also maintain a research and development facility in Cambridge, Massachusetts, where we lease approximately 13,568 square feet of space for office and laboratory facilities under a lease that expires in January 2018 and approximately 7,484 square feet under a lease that expires in April 2020.

Manufacturing

We currently conduct part of our manufacturing business in our leased laboratory facilities in Cambridge, Massachusetts. We believe our current laboratory facilities are sufficient to meet our bioprocess development and manufacturing needs through mid-2015, after which we expect to require purpose-built or renovated space to prepare for commercialization of SER-109. SER-262, SER-287, SER-155 and other product candidates may be brought into the SER-109 facilities for economies of operation, or may remain external with contract manufacturing organizations, depending on business dynamics and development needs.

In preparation for commercial production of SER-109, we intend to bring raw material donor qualification and management and donation processing into a new facility operated by us that will meet commercial requirements. The location of this facility is yet to be determined. We estimate that capital costs for setting up such a facility will be approximately \$2.0 million, and that it will be operated by our staff.

We plan to control the production of SER-109 under cGMP by making strategic investments in manufacturing, which may include collaborations with third parties, the design and renovation of existing facilities and the construction of new facilities.

Legal Proceedings

We are not party to any material legal proceedings.

MANAGEMENT

Executive Officers, Key Employees and Directors

The following table sets forth the name, age and position of each of our executive officers, key employees and directors as of May 13, 2015.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Executive Officers		
Roger J. Pomerantz, M.D.	58	President and Chief Executive Officer and Director
John G. Aunins, Ph.D.	54	Chief Technology Officer and Executive Vice President of Bioprocess Development
David N. Cook, Ph.D.	57	Chief Scientific Officer and Executive Vice President of Research & Development
Eric D. Shaff.	39	Chief Financial Officer and Executive Vice President
Michele Trucksis, Ph.D., M.D.	62	Chief Medical Officer and Executive Vice President
Other Key Employees		
Matthew Henn, Ph.D.	40	Head of Drug Discovery & Bioinformatics and Vice President
Directors		
Noubar B. Afeyan, Ph.D.	52	Director
Dennis A. Ausiello, M.D.	69	Director
Grégory Behar	45	Director
Werner Cautreels, Ph.D.	62	Director
Peter Barton Hutt	80	Director
Richard N. Kender	59	Director
Lorence H. Kim, M.D.	41	Director

(1) Member of the audit committee.

(2) Member of the compensation committee.

(3) Member of the nominating and corporate governance committee.

Executive Officers and Other Key Employees

Roger J. Pomerantz, M.D., has served as our President and Chief Executive Officer since June 2014 and as Chairman of our board of directors since November 2013. Since July 2014, Dr. Pomerantz has been a Senior Partner at Flagship Ventures, an early-stage venture capital firm. From January 2011 to September 2013, Dr. Pomerantz was Worldwide Head of Licensing and Acquisitions and Senior Vice President at Merck & Co., Inc., or Merck, a pharmaceutical company, where he oversaw licensing and acquisitions for Merck Research Laboratories, the research and development division of Merck. From February 2010 to February 2013, Dr. Pomerantz served as Global Head of Infectious Diseases and Senior Vice President at Merck, where he oversaw pharmaceutical development and discovery of antibiotics, antivirals, antifungals and antiparasitic agents. From August 2005 to February 2010, Dr. Pomerantz was President of Tibotec Pharmaceuticals, Inc., now Janssen Therapeutics, a pharmaceutical company focused on the treatment of infectious diseases. Dr. Pomerantz has developed eight approved infectious disease drugs for diseases including HIV, HCV and tuberculosis. He also serves on the board of directors of Contrafect Corporation, a biotechnology company. Dr. Pomerantz received his B.A. in Biochemistry from The Johns Hopkins University and his M.D. from The Johns Hopkins School of Medicine. We believe Dr. Pomerantz's extensive academic and clinical experience, as well as his knowledge of the pharmaceutical industry, qualifies him to serve on our board of directors.

John G. Aunins, Ph.D., has served as our Chief Technology Officer and Executive Vice President of Bioprocess Development since December 2012. Prior to joining our company, Dr. Aunins served on

our Scientific Advisory Board from February 2012 to December 2012. From April 1989 to November 2011, Dr. Aunins served in various roles at Merck, most recently as Executive Science Director. At Merck, Dr. Aunins led process and product development teams for six licensed vaccines and multiple vaccine candidates. He is a Fellow of the American Institute for Medical and Biological Engineering and an adjunct Full Professor at the Instituto de Tecnologia Quimica e Biologica in Oeiras, Portugal. Dr. Aunins received his B.S. from the University of Kansas and his Ph.D. in Chemical Engineering from the Massachusetts Institute of Technology.

David N. Cook, Ph.D., has served as our Chief Scientific Officer and Executive Vice President of Research & Development since October 2012. From February 2010 to October 2012, Dr. Cook was the Chief Operating Officer at the International AIDS Vaccine Initiative, a global not-for-profit, research and development organization focused on the development of a safe and accessible vaccine for HIV. As Chief Operating Officer, Dr. Cook acted as the head of operations, overseeing seven international offices and research facilities. Dr. Cook received his A.B. from Harvard College and his Ph.D. in Chemistry from the University of California, Berkeley.

Matthew Henn, Ph.D., has served as our Head of Drug Discovery & Bioinformatics since December 2014 and as Vice President since May 2015. From June 2012 to December 2014, Dr. Henn served as our Head of Product Design. From April 2010 to June 2012, Dr. Henn was Director of Viral Genomics and, from May 2009 to April 2010, Assistant Director of the Genome Sequencing Center for Infectious Diseases at the Broad Institute of Harvard and MIT, a biomedical research organization. Dr. Henn has over 60 peer-reviewed publications in microbiology and bioinformatics. He is a scientific advisor for the National Institutes of Health's Viral Pathogen Bioinformatics Resource Center and served on the editorial board of *Genome Medicine* from 2010 to 2015. Dr. Henn received his B.S. from the University of New Hampshire and his Ph.D. in Ecosystem Sciences from the University of California, Berkeley.

Eric D. Shaff has served as our Chief Financial Officer and Executive Vice President since November 2014. From January 2012 to November 2014, Mr. Shaff was Vice President of Corporate Finance for Momenta Pharmaceuticals, a biotechnology company. From June 2004 to December 2011, Mr. Shaff held a number of corporate development and finance positions with Genzyme Corporation, a biotechnology company, most recently as Vice President of Finance/Controller for the Personalized Genetic Health division. Mr. Shaff received his B.A. from the University of Pennsylvania and his MBA from Cornell University.

Michele Trucksis, Ph.D., M.D., has served as our Chief Medical Officer and Executive Vice President since January 2015. Dr. Trucksis has been an Associate Clinical Professor at Harvard Medical School since January 2005. From December 2006 to December 2014, Dr. Trucksis held various positions of increasing seniority at Merck Research Laboratories, the research and development division of Merck. Most recently, from June 2014 to December 2014, Dr. Trucksis served as Executive Director, Team Leader & Clinical Lead, Antifungals and Antibacterials where she was responsible for medical, clinical and global product development and strategy. From July 2011 to June 2014, Dr. Trucksis was Project Leader, Antifungals and Antibacterials, and from December 2006 to July 2011, she was Director in Clinical Pharmacology. Dr. Trucksis received her B.S. in Medical Technology from Youngstown State University, her Ph.D. in Biochemistry from Kent State University and her M.D. from Case Western Reserve University School of Medicine.

Directors

Noubar B. Afeyan, Ph.D., has served as a member of our board of directors since October 2010. Since 1999, Dr. Afeyan has served as the Managing Partner and Chief Executive Officer of Flagship Ventures, an early-stage venture capital firm that he co-founded. Dr. Afeyan has served on the board of directors of BG Medicine, Inc., a medical diagnostic device company, since April 2000 and on the board of directors of Eleven Biotherapeutics, a biopharmaceutical company, since September 2008.

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Dr. Afeyan received a B.S. from McGill University and a Ph.D. in Biochemical Engineering from the Massachusetts Institute of Technology. We believe Dr. Afeyan is qualified to serve on our board of directors because of his extensive investment experience and his knowledge of the biotechnology industry.

Dennis A. Ausiello, M.D., has served as a member of our board of directors since May 2015. Dr. Ausiello serves as the Director of the Center for Assessment Technology and Continuous Health (CATCH), Jackson Distinguished Professor of Clinical Medicine at Harvard Medical School and Physician-in-Chief Emeritus at Massachusetts General Hospital. From 1996 to April 2013, Dr. Ausiello served as the Chief of Medicine at Massachusetts General Hospital. Dr. Ausiello is a member of the Institute of Medicine of the National Academy of Sciences and a fellow of the American Academy of Arts and Sciences. Dr. Ausiello has also served on the board of directors of Pfizer Inc. since December 2006 and Alnylam Pharmaceuticals since April 2012, each a pharmaceutical company. Dr. Ausiello received his undergraduate degree from Harvard College and an M.D. from the University of Pennsylvania. We believe that Dr. Ausiello is qualified to serve on our board of directors because of his extensive experience as a physician and as a director of pharmaceutical companies.

Grégory Behar has served as a member of our board of directors since December 2014. Mr. Behar has served as Chief Executive Officer of Nestlé Health Science S.A., a health sciences company, since October 2014. From July 2011 to July 2014, Mr. Behar was President and Chief Executive Officer of Boehringer Ingelheim Pharmaceuticals Inc. (USA), a pharmaceutical company. From 2010 to July 2011, Mr. Behar was Corporate Vice President Region NECAR (North European Union, Canada and Australasia) for Boehringer-Ingelheim GmbH, a pharmaceutical company. Mr. Behar received his B.S. from the University of California, Los Angeles, a M.S. in Mechanical Engineering and Manufacturing from EPFL in Switzerland and an MBA from INSEAD in France. We believe that Mr. Behar is qualified to serve on our board of directors because of his extensive business experience in the health sciences and pharmaceutical industries.

Werner Cautreels, Ph.D., has served as a member of our board of directors since March 2013. Dr. Cautreels has served as President and Chief Executive Officer of Selecta Biosciences, a biotechnology company, since June 2010. From May 1998 to June 2010, Dr. Cautreels worked for Solvay Pharmaceuticals, the pharmaceutical division of the Solvay Group, which was acquired by Abbot Laboratories. Since 2009, Dr. Cautreels has served on the board of directors of Galapagos NV, a biotechnology company. Dr. Cautreels received a B.S. and M.S. and a doctorate in Chemistry from the University of Antwerp and an eMBA from Harvard Business School. We believe Dr. Cautreels is qualified to serve on our board of directors because of his extensive experience in the biotechnology industry.

Peter Barton Hutt has served as a member of our board of directors since May 2013. Mr. Hutt is senior counsel at Covington & Burling LLP, specializing in food and drug law. Mr. Hutt has served as a member of the board of directors of Momenta Pharmaceuticals, Inc. since 2001, Q Therapeutics, Inc. since 2002, Xoma Corporation since 2005, Concert Pharmaceuticals since 2007, BIND Therapeutics, Inc. since 2008 and DBV Technologies since 2009, each a biotechnology company. Mr. Hutt received a B.A. from Yale University, an LL.B. from Harvard Law School and an LL.M. from the New York University School of Law. We believe that Mr. Hutt is qualified to serve on our board of directors because of his experience serving as a director of biotechnology companies and his legal and regulatory knowledge.

Richard N. Kender has served as a member of our board of directors since October 2014. From October 1978 to September 2013, Mr. Kender held positions in a variety of corporate areas at Merck, most recently serving as Senior Vice President of Business Development and Corporate Licensing.

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Mr. Kender received a B.S. from Villanova University and an MBA from Fairleigh Dickinson University. We believe Mr. Kender is qualified to serve on our board of directors because of his extensive business experience and his knowledge of the pharmaceutical industry.

Lorence H. Kim, M.D., has served as a member of our board of directors since October 2014. Since April 2014, Dr. Kim has been the Chief Financial Officer of Moderna Therapeutics, a biotechnology company. From July 2000 to April 2014, Dr. Kim held a number of positions at Goldman, Sachs & Co., an investment bank, most recently as Managing Director and Co-Head of Biotechnology Investment Banking. Dr. Kim received an A.B. from Harvard University, an MBA in Healthcare Management from the Wharton School of the University of Pennsylvania and an M.D. from the University of Pennsylvania's School of Medicine. We believe Dr. Kim is qualified to serve on our board of directors because of his investment experience and knowledge of the biotechnology industry.

Board Composition and Election of Directors

Director Independence

Our board of directors currently consists of eight members. Our board of directors has determined that of our eight directors, _____, _____, and _____ do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the rules of The NASDAQ Global Market, or NASDAQ. There are no family relationships among any of our directors or executive officers.

Classified Board of Directors

In accordance with our restated certificate of incorporation and amended and restated bylaws that will go into effect upon the closing of this offering, our board of directors will be divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Effective upon the closing of this offering, our directors will be divided among the three classes as follows:

- the Class I directors will be _____, _____ and _____, and their terms will expire at our first annual meeting of stockholders following this offering;
- the Class II directors will be _____, _____ and _____, and their terms will expire at our second annual meeting of stockholders following this offering; and
- the Class III directors will be _____, _____ and _____, and their terms will expire at the third annual meeting of stockholders following this offering.

Our restated certificate of incorporation that will go into effect upon the closing of this offering will provide that the authorized number of directors may be changed only by resolution of the board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of our company. Our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of our outstanding voting stock entitled to vote in the election of directors.

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In selecting board members, our board may consider many factors, such as personal and professional integrity, ethics and values; experience in corporate management, such as serving as an officer or former officer of a publicly held company; experience as a board member or executive officer of another publicly held company; diversity of expertise and experience in substantive matters pertaining to our business relative to other board members; and diversity of background and perspective, including, but not limited to, with respect to age, gender, race, place of residence and specialized experience.

Board Leadership Structure

Our board of directors is currently chaired by our President and Chief Executive Officer, Dr. Roger Pomerantz. Our corporate governance guidelines provide that, if the chairman of the board is a member of management or does not otherwise qualify as independent, the independent directors of the board may elect a lead director. Dr. Pomerantz currently serves as our lead director. The lead director's responsibilities include, but are not limited to: presiding over all meetings of the board of directors at which the chairman is not present, including any executive sessions of the independent directors; approving board meeting schedules and agendas; and acting as the liaison between the independent directors and the chief executive officer and chairman of the board. Our corporate governance guidelines further provide the flexibility for our board of directors to modify our leadership structure in the future as it deems appropriate.

Role of the Board in Risk Oversight

One of the key functions of our board of directors is informed oversight of our risk management process. Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through our board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure and our audit committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. Our audit committee also monitors compliance with legal and regulatory requirements. Our nominating and corporate governance committee monitors the effectiveness of our corporate governance practices, including whether they are successful in preventing illegal or improper liability-creating conduct. Our compensation committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, our entire board of directors is regularly informed through committee reports about such risks.

Board Committees

Our board of directors has established three standing committees—audit, compensation and nominating and corporate governance—each of which operates under a charter that has been approved by our board of directors. Upon the closing of this offering, each committee's charter will be available under the Corporate Governance section of our website at www.serestherapeutics.com. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus.

Audit Committee

The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk management policies;
- establishing policies regarding hiring employees from the registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by Securities Exchange Commission, or SEC, rules.

The members of our audit committee are _____, _____ and _____. _____ serves as the chairperson of the committee. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. Our board of directors has determined that _____ and _____ meet the independence requirements of Rule 10A-3 under the Exchange Act and the applicable listing standards of NASDAQ. Since our board of directors has determined that _____ does not meet the requirements of Rule 10A-3 under the Exchange Act, we are relying on the independence phase-in rules for newly listed companies and plan to add a third independent director to the audit committee within one year of listing. Our board of directors has determined that _____ is an "audit committee financial expert" as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable NASDAQ rules and regulations.

Compensation Committee

The compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to CEO compensation;
- determining our CEO's compensation;
- reviewing and approving, or making recommendations to our board with respect to, the compensation of our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board of directors with respect to director compensation;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis"; and
- preparing the annual compensation committee report required by SEC rules.

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The members of our compensation committee are _____, _____ and _____. _____ serves as the chairperson of the committee. Our board of directors has determined that each of _____ and _____ is independent under the applicable NASDAQ rules and regulations, is a “non-employee director” as defined in Rule 16b-3 promulgated under the Securities Exchange Act and is an “outside director” as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, as amended.

Nominating and Corporate Governance Committee

The nominating and corporate governance committee's responsibilities include:

- identifying individuals qualified to become board members;
- recommending to our board of directors the persons to be nominated for election as directors and to each board committee;
- reviewing and making recommendations to our board of directors with respect to management succession planning;
- developing and recommending to our board of directors corporate governance principles; and
- overseeing an annual evaluation of our board of directors.

The members of our nominating and corporate governance committee are _____, _____ and _____. _____ serves as the chairperson of the committee. Our board of directors has determined that _____ and _____ are independent under the applicable NASDAQ rules and regulations.

Compensation Committee Interlocks and Insider Participation

No member of our compensation committee is or has been our current or former officer or employee. None of our executive officers served as a director or a member of a compensation committee (or other committee serving an equivalent function) of any other entity, one of whose executive officers served as a director or member of our compensation committee during the fiscal year ended December 31, 2014.

Code of Ethics and Code of Conduct

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Upon the closing of this offering, our code of business conduct and ethics will be available under the Corporate Governance section of our website at www.serestherapeutics.com. In addition, we intend to post on our website all disclosures that are required by law or the listing standards of NASDAQ concerning any amendments to, or waivers from, any provision of the code. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus.

EXECUTIVE AND DIRECTOR COMPENSATION

Executive Compensation

This section discusses the material components of the executive compensation program offered to our named executive officers, or NEOs, identified below. For 2014, our NEOs were:

- Roger J. Pomerantz, M.D., President and Chief Executive Officer;
- David A. Berry, M.D., Ph.D., former Interim President and Chief Executive Officer;
- Eric D. Shaff, Chief Financial Officer and Executive Vice President; and
- David N. Cook, Ph.D., Chief Scientific Officer and Executive Vice President of Research & Development.

This discussion may contain forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt following the closing of this offering may differ materially from the currently planned programs summarized in this discussion.

We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012, or JOBS Act, and have elected to comply with the reduced compensation disclosure requirements available to emerging growth companies under the JOBS Act.

2014 Summary Compensation Table

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Bonus (\$)⁽⁴⁾</u>	<u>Option Awards (\$)⁽⁵⁾</u>	<u>All Other Compensation (\$)</u>	<u>Total (\$)</u>
Roger J. Pomerantz, M.D. ⁽¹⁾ <i>President and Chief Executive Officer</i>	2014	247,917	233,750	6,567,603	69,393 ⁽⁶⁾	7,118,663
David A. Berry, M.D., Ph.D. ⁽²⁾ <i>Former Interim President and Chief Executive Officer</i>	2014	136,500	—	—	—	136,500
	2013	125,667	—	—	—	125,667
Eric D. Shaff ⁽³⁾ <i>Chief Financial Officer and Executive Vice President</i>	2014	35,192	12,205	1,413,756	—	1,461,153
David N. Cook, Ph.D. <i>Chief Scientific Officer and Executive Vice President of Research & Development</i>	2014	300,000	99,000	—	—	399,000
	2013	300,000	—	113,119	21,201	434,320

- (1) We hired Dr. Pomerantz as our President and Chief Executive Officer effective June 1, 2014. Dr. Pomerantz’s 2014 annual base salary was \$425,000. Dr. Pomerantz also serves as Chairman of our board of directors but receives no additional compensation for this service.
- (2) Dr. Berry served as our Interim President and Chief Executive Officer from March 29, 2013 through May 30, 2014. Dr. Berry is a Partner at Flagship Ventures and also served as a member of our board of directors during 2014. Dr. Berry received no compensation from us for his service as our Interim President and Chief Executive Officer or as a member of our board of directors during 2014. However, we paid Flagship Ventures Management, Inc., an affiliate of Flagship Ventures, a total of \$136,500 for services provided to us by Dr. Berry during 2014. For a further discussion of the services agreement, refer to “Certain Relationships and Related Person Transactions—Services Agreement”.
- (3) We hired Mr. Shaff as our Chief Financial Officer and Executive Vice President effective November 19, 2014. Mr. Shaff’s 2014 annual base salary was \$300,000.
- (4) Represents amounts paid under our annual cash bonus program. For additional information regarding these amounts, refer to “—Narrative Disclosure to Summary Compensation Table—Annual Cash Bonuses.”
- (5) Represents the aggregate grant date fair value of the option awards computed in accordance with FASB ASC Topic 718. For a description of the assumptions used in valuing these awards, see Note 10 to our audited consolidated financial statements included elsewhere in this prospectus.
- (6) Represents reimbursement of travel and lodging costs associated with working in the Cambridge, Massachusetts area.

Narrative Disclosure to Summary Compensation Table

The primary elements of compensation for our NEOs are base salary, annual cash bonuses and long-term, equity-based compensation awards. The NEOs also participate in employee benefit plans and programs that we offer to our other full-time employees on the same basis.

Base Salary

Our NEOs receive base salary to compensate them for the satisfactory performance of duties to our company. The base salary payable to each NEO is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. Dr. Pomerantz's and Mr. Shaff's 2014 annual base salaries were determined as a result of negotiations with the NEO in connection with his commencing employment. Dr. Cook did not receive a base salary increase during 2014. Our board of directors approved, effective February 1, 2015, an increase in Dr. Pomerantz's base salary to \$439,875 and Mr. Cook's base salary to \$310,500.

Annual Cash Bonuses

Our NEOs have the opportunity to earn annual performance bonuses based on the achievement of short-term performance goals. Each of Dr. Pomerantz and Mr. Shaff are entitled to receive an annual bonus with a target amount equal to 50% and 30%, respectively, of his annual base salary, except that Mr. Shaff's 2014 annual bonus will be prorated to reflect his partial year of service.

In determining 2014 annual bonuses for our NEOs our board of directors considered our achievement of business development and financing milestones, completion of capital raising transactions and successful executive recruitment and hiring during 2014 and the individual NEO's contributions to these successes. The actual amounts that our board of directors elected to pay our NEOs under our annual cash bonus program are set forth in the "Bonus" column of the Summary Compensation Table above.

Equity-Based Compensation

We generally offer stock options to our employees, including our NEOs, as the long-term incentive component of our compensation program. We typically grant options to employees when they commence employment with us and may thereafter grant additional options in the discretion of our board of directors or its compensation committee. Our stock options allow employees to purchase shares of our common stock at a price equal to the fair market value of our common stock on the date of grant, as determined by our board of directors, and may be intended to qualify as "incentive stock options" under the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code.

Our stock options typically vest as to 25% of the shares subject to the option on the first anniversary of the grant date (or service commencement date for initial grants) and as to 6.25% of the shares subject to the option every third month during the three-year period thereafter, subject to the holder's continued service with us. From time to time, our board of directors may also construct alternate vesting schedules as it determines are appropriate to motivate particular employees. Stock options granted to our employees may be subject to accelerated vesting in certain circumstances, as described in the section titled "Employment Agreements."

In connection with Dr. Pomerantz's hire as our President and Chief Executive Officer, in August 2014, we granted him an option to purchase 1,675,751 shares of our common stock at an exercise price per share of \$0.71, which our board of directors determined to be the fair market value of our common stock on the date of grant. The option is subject to our standard vesting terms described above. In connection with Mr. Shaff's hire as our Chief Financial Officer and Executive Vice

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President, in December 2014, we granted him an option to purchase 262,692 shares of our common stock at an exercise price per share of \$7.79, which our board of directors determined to be the fair market value of our common stock on the date of grant. The option is subject to our standard vesting terms described above. Dr. Cook did not receive an equity award grant during 2014.

In connection with this offering, we intend to adopt a new incentive plan to facilitate the grant of cash and equity incentives to our directors, employees and consultants and to enable our company to obtain and retain the services of these individuals. Additional information about our new incentive plan is provided in the section titled “Incentive Plans—2015 Incentive Award Plan” below.

In addition, effective upon the effectiveness of the registration statement of which this prospectus is a part, we intend to grant Messrs. _____ options to purchase _____ shares of our common stock at an exercise price per share equal to the public offering price of our common stock in this offering. These options will vest as to 25% of the underlying shares on the first anniversary of the grant date and as to 6.25% of the underlying shares on the last day of each calendar quarter during the three-year period thereafter, subject to the holder’s continued service with us and potential accelerated vesting as described in the section titled “Employment Agreements.”

Retirement, Health, Welfare and Additional Benefits

Our NEOs are eligible to participate in our employee benefit plans and programs, including medical and dental benefits and life insurance, to the same extent as our other full-time employees, subject to the terms and eligibility requirements of those plans. We also sponsor a 401(k) defined contribution plan in which our NEOs may participate, subject to limits imposed by the Internal Revenue Code, to the same extent as all of our other full-time employees. We do not currently, nor did we during 2014, match contributions made by participants in the 401(k) plan or make other contributions to participant accounts. We do not typically provide any perquisites or special personal benefits to our NEOs, but have from time to time reimbursed commuting and relocation expenses for our NEOs.

Outstanding Equity Awards at 2014 Fiscal Year-End

<u>Name</u>	<u>Vesting Commencement Date</u>	<u>Option Awards</u>		<u>Option Exercise Price (\$)</u>	<u>Option Expiration Date</u>
		<u>Number of Securities Underlying Unexercised Options (#) Exercisable</u>	<u>Number of Securities Underlying Unexercised Options (#) Unexercisable⁽¹⁾</u>		
Roger J. Pomerantz, M.D.	6/1/2014	—	1,675,751	0.71	8/6/2024
	9/9/2013	82,500	137,500	0.48	11/5/2023
David A. Berry, M.D., Ph.D.	—	—	—	—	—
Eric D. Shaff	11/17/2014	—	262,692	7.79	12/8/2024
David N. Cook, Ph.D.	10/24/2012	184,218	143,282	0.48	5/16/2023

(1) All options vest as to 25% of the total shares subject to the option on the first anniversary of the vesting commencement date, and as to 6.25% of the shares subject to the option on the last day of each calendar quarter during the three-year period thereafter, subject to the holder’s continued employment with us through the applicable vesting date and potential accelerated vesting as described in the section titled “Employment Agreements.”

Employment Agreements

We intend to enter into employment agreements with each of our NEOs that will become effective on the closing of this offering. Certain key terms of these agreements are described below.

Roger J. Pomerantz, M.D.

The employment agreement with Dr. Pomerantz entitles him to an initial annual base salary of \$464,100, subject to periodic review and adjustment by our board of directors, and an annual target bonus opportunity of 50% of his annual base salary.

In the event Dr. Pomerantz's employment is terminated by us without cause or he resigns for good reason, subject to his timely executing a release of claims in our favor, he is entitled to receive 12 months of continued base salary and up to 12 months of continued medical, dental or vision coverage pursuant to COBRA, if elected. If the termination occurs within 60 days prior to or 12 months following a change in control, Dr. Pomerantz is also entitled to accelerated vesting of his time-based equity awards.

Dr. Pomerantz has agreed to refrain from disclosing our confidential information during or at any time following his employment with us and from competing with us or soliciting our employees or consultants for 12 months following termination of his employment.

For purposes of the employment agreement:

Ÿ "Cause" generally means Dr. Pomerantz's (i) failure to substantially perform his duties with us (other than due to disability) or materially comply with our policies; (ii) material failure to carry out or comply with any lawful and reasonable directive of our board of directors; (iii) breach of a material provision of his employment agreement; (iv) conviction, plea of no contest or imposition of unadjudicated probation for any felony or crime involving moral turpitude; (v) unlawful use (including being under the influence) or possession of illegal drugs on our (or our affiliate's) premises or while performing his duties and responsibilities under his employment agreement or (vi) commission of an act of fraud, embezzlement, misappropriation, willful misconduct or breach of fiduciary duty against us or any of our affiliates.

Ÿ "Good reason" generally means, subject to certain notice requirements and cure rights, without Dr. Pomerantz's consent, (i) a reduction in his base salary (except for a reduction of less than 10% contemporaneously affecting other senior executives); (ii) a material reduction in his authority or areas of responsibility or (iii) a relocation his primary office more than 50 miles outside of the Boston metropolitan area.

Eric D. Shaff and David N. Cook, Ph.D.

The employment agreements with Mr. Shaff and Dr. Cook entitle them to initial annual base salaries of \$324,500 and \$355,900, respectively, subject to periodic review and adjustment by our board of directors, and annual target bonus opportunities of 35% of their annual base salaries.

In the event either of Mr. Shaff or Dr. Cook is terminated by us without cause or he resigns for good reason, subject to his timely executing a release of claims in our favor, he is entitled to receive six months of continued base salary and up to six months of continued medical, dental or vision coverage pursuant to COBRA, if elected. If either of Mr. Shaff's or Dr. Cook's termination occurs within 60 days prior to or 12 months following a change in control, he is also entitled to accelerated vesting of his time-based equity awards.

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Each of Mr. Shaff and Dr. Cook has agreed to refrain from disclosing our confidential information during or at any time following his employment with us and from competing with us or soliciting our employees or consultants for 12 months following termination of his employment.

For purposes of the employment agreements, "cause" and "good reason" have the same meanings as in Dr. Pomerantz's employment agreement.

Incentive Plans

2015 Incentive Award Plan

In connection with this offering, we intend to adopt and ask our stockholders to approve a 2015 Incentive Award Plan, or the 2015 Plan, under which we may grant cash and equity incentive awards to eligible service providers in order to attract, motivate and retain the talent for which we compete. The material terms of the 2015 Plan, as it is currently contemplated, are summarized below. Our board of directors is still in the process of developing, approving and implementing the 2015 Plan and, accordingly, this summary is subject to change.

Eligibility and Administration

Our employees, consultants and directors, and employees, consultants and directors of our subsidiaries, will be eligible to receive awards under the 2015 Plan. Following our initial public offering, the 2015 Plan will be administered by our board of directors with respect to awards to non-employee directors and by our compensation committee with respect to other participants, each of which may delegate its duties and responsibilities to committees of our directors and/or officers (referred to collectively as the plan administrator below), subject to certain limitations that may be imposed under Section 16 of the Securities Exchange Act and/or stock exchange rules, as applicable. The plan administrator will have the authority to make all determinations and interpretations under, prescribe all forms for use with, and adopt rules for the administration of, the 2015 Plan, subject to its express terms and conditions. The plan administrator will also set the terms and conditions of all awards under the 2015 Plan, including any vesting and vesting acceleration conditions.

Limitation on Awards and Shares Available

An aggregate of _____ shares of our common stock will initially be available for issuance under awards granted pursuant to the 2015 Plan. The number of shares initially available for issuance will be increased by (i) the number of shares represented by awards outstanding under our 2012 Plan (defined below) that are forfeited, lapse unexercised or are settled in cash and which following the effective date of the 2015 Plan are not issued under the 2012 Plan and (ii) an annual increase on January 1 of each calendar year beginning in 2016 and ending in 2025, equal to the lesser of (a) 4% of the shares of common stock outstanding on the final day of the immediately preceding calendar year and (b) such smaller number of shares as determined by our board of directors. No more than _____ shares of common stock may be issued upon the exercise of incentive stock options. Shares issued under the 2015 Plan may be authorized but unissued shares, or shares purchased in the open market.

If an award under the 2015 Plan is forfeited, expires or is settled for cash, any shares subject to such award may, to the extent of such forfeiture, expiration or cash settlement, be used again for new grants under the 2015 Plan. Awards granted under the 2015 Plan upon the assumption of, or in substitution for, awards authorized or outstanding under a qualifying equity plan maintained by an entity with which we enter into a merger or similar corporate transaction will not reduce the shares available for grant under the 2015 Plan. The maximum number of shares of our common stock that may be subject to one or more awards granted to any non-employee director for services as a director pursuant to the 2015 Plan during any calendar year will be _____.

Awards

The 2015 Plan provides for the grant of stock options, including incentive stock options, or ISOs, and nonqualified stock options, or NSOs, restricted stock, dividend equivalents, stock payments, restricted stock units, or RSUs, performance shares, other incentive awards, stock appreciation rights, or SARs and cash awards. Certain awards under the 2015 Plan may constitute or provide for a deferral of compensation, subject to Section 409A of the Internal Revenue Code, which may impose additional requirements on the terms and conditions of such awards. All awards under the 2015 Plan will be set forth in award agreements, which will detail the terms and conditions of the awards, including any applicable vesting and payment terms and post-termination exercise limitations. Awards other than cash awards generally will be settled in shares of our common stock, but the plan administrator may provide for cash settlement of any award. A brief description of each award type follows.

- ÿ *Stock Options.* Stock options provide for the purchase of shares of our common stock in the future at an exercise price set on the grant date. ISOs, by contrast to NSOs, may provide tax deferral beyond exercise and favorable capital gains tax treatment to their holders if certain holding period and other requirements of the Internal Revenue Code are satisfied. The exercise price of a stock option generally will not be less than 100% of the fair market value of the underlying share on the date of grant (or 110% in the case of ISOs granted to certain significant stockholders), except with respect to certain substitute options granted in connection with a corporate transaction. The term of a stock option may not be longer than ten years (or five years in the case of ISOs granted to certain significant stockholders). Vesting conditions determined by the plan administrator may apply to stock options and may include continued service, performance and/or other conditions.
- ÿ *SARs.* SARs entitle their holder, upon exercise, to receive from us an amount equal to the appreciation of the shares subject to the award between the grant date and the exercise date. The exercise price of a SAR will generally not be less than 100% of the fair market value of the underlying share on the date of grant (except with respect to certain substitute SARs granted in connection with a corporate transaction), and the term of a SAR may not be longer than ten years. Vesting conditions determined by the plan administrator may apply to SARs and may include continued service, performance and/or other conditions.
- ÿ *Restricted Stock, RSUs and Performance Shares.* Restricted stock is an award of nontransferable shares of our common stock that remain forfeitable unless and until specified conditions are met, and which may be subject to a purchase price. RSUs are contractual promises to deliver shares of our common stock in the future, which may also remain forfeitable unless and until specified conditions are met. Delivery of the shares underlying RSUs may be deferred under the terms of the award or at the election of the participant, if the plan administrator permits such a deferral. Performance shares are contractual rights to receive a range of shares of our common stock in the future based on the attainment of specified performance goals, in addition to other conditions which may apply to these awards. Conditions applicable to restricted stock, RSUs and performance shares may be based on continuing service, the attainment of performance goals and/or such other conditions as the plan administrator may determine.
- ÿ *Stock Payments, Other Incentive Awards and Cash Awards.* Stock payments are awards of fully vested shares of our common stock that may, but need not, be made in lieu of base salary, bonus, fees or other cash compensation otherwise payable to any individual who is eligible to receive awards. Other incentive awards are awards other than those enumerated in this summary that are denominated in, linked to or derived from shares of our common stock or value metrics related to our shares, and may remain forfeitable unless and until specified conditions are met. Cash awards are cash incentive bonuses subject to performance goals.
- ÿ *Dividend Equivalents.* Dividend equivalents represent the right to receive the equivalent value of dividends paid on shares of our common stock and may be granted alone or in tandem with

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awards. Dividend equivalents are credited as of dividend record dates during the period between the date an award is granted and the date such award vests, is exercised, is distributed or expires, as determined by the plan administrator.

Performance Awards

Performance awards include any of the foregoing awards that are granted subject to vesting and/or payment based on the attainment of specified performance goals or other criteria the plan administrator may determine, which may or may not be objectively determinable. Performance criteria upon which performance goals are established by the plan administrator may include but are not limited to: (i) net earnings or losses (either before or after one or more of interest, taxes, depreciation, amortization and non-cash equity-based compensation expense); (ii) gross or net sales or revenue or sales or revenue growth; (iii) net income (either before or after taxes) or adjusted net income; (iv) profits (including, but not limited to, gross profits, net profits, profit growth, net operation profit or economic profit), profit return ratios or operating margin; (v) budget or operating earnings (either before or after taxes or before or after allocation of corporate overhead and bonus); (vi) cash flow (including operating cash flow and free cash flow or cash flow return on capital); (vii) return on assets; (viii) return on capital or invested capital; (ix) cost of capital; (x) return on stockholders' equity; (xi) total stockholder return; (xii) return on sales; (xiii) costs, reductions in costs and cost control measures; (xiv) expenses; (xv) working capital; (xvi) earnings or loss per share; (xvii) adjusted earnings or loss per share; (xviii) price per share or dividends per share (or appreciation in or maintenance of such price or dividends); (xix) regulatory achievements or compliance; (xx) implementation, completion or attainment of objectives relating to research, development, regulatory, commercial or strategic milestones or developments; (xxi) market share; (xxii) economic value or economic value added models; (xxiii) division, group or corporate financial goals; (xxiv) customer satisfaction/growth; (xxv) customer service; (xxvi) employee satisfaction; (xxvii) recruitment and maintenance of personnel; (xxviii) human resources management; (xxix) supervision of litigation and other legal matters; (xxx) strategic partnerships and transactions; (xxxi) financial ratios (including those measuring liquidity, activity, profitability or leverage); (xxxii) debt levels or reductions; (xxxiii) sales-related goals; (xxxiv) financing and other capital raising transactions; (xxxv) cash on hand; (xxxvi) acquisition activity; (xxxvii) investment sourcing activity; and (xxxviii) marketing initiatives.

Certain Transactions

In connection with certain transactions and events affecting our common stock, including a change in control, or change in any applicable laws or accounting principles, the plan administrator has broad discretion to take action under the 2015 Plan to prevent the dilution or enlargement of intended benefits, facilitate such transaction or event, or give effect to such change in applicable laws or accounting principles. This includes canceling awards, accelerating the vesting of awards, providing for the assumption or substitution of awards by a successor entity, adjusting the number and type of shares available and replacing or terminating awards under the 2015 Plan. In addition, in the event of certain non-reciprocal transactions with our stockholders, or an "equity restructuring," the plan administrator will make equitable adjustments to the 2015 Plan and outstanding awards as it deems appropriate to reflect the equity restructuring.

Foreign Participants, Claw-Back Provisions, Transferability and Participant Payments

With respect to foreign participants, the plan administrator may modify award terms, establish subplans and/or adjust other terms and conditions of awards, subject to the share limits described above. All awards will be subject to the provisions of any claw-back policy implemented by our company to the extent set forth in such claw-back policy or in the applicable award agreement. With limited exceptions for estate planning, domestic relations orders, certain beneficiary designations and

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the laws of descent and distribution, awards under the 2015 Plan are generally non-transferable prior to vesting, and are exercisable only by the participant. With regard to tax withholding, exercise price and purchase price obligations arising in connection with awards under the 2015 Plan, the plan administrator may, in its discretion, accept cash, wire transfer, or check, shares of our common stock that meet specified conditions, a “market sell order” or such other consideration as it deems suitable.

Plan Amendment and Termination

Our board of directors may amend or terminate the 2015 Plan at any time; however, except in connection with certain changes in our capital structure, stockholder approval will be required for any amendment that increases the number of shares available under the 2015 Plan. The plan administrator will have the authority, without the approval of our stockholders, to amend any outstanding stock option or SAR to reduce its price per share. No award may be granted pursuant to the 2015 Plan after the tenth anniversary of the date on which our board of directors adopts the 2015 Plan.

2015 Employee Stock Purchase Plan

In connection with this offering, we intend to adopt and ask our stockholders to approve a 2015 Employee Stock Purchase Plan, or the ESPP. The material terms of the ESPP, as it is currently contemplated, are summarized below. Our board of directors is still in the process of considering the ESPP and, accordingly, this summary is subject to change.

Shares Available; Administration

A total of _____ shares of our common stock are initially reserved for issuance under our ESPP. In addition, the number of shares available for issuance under the ESPP will be annually increased on January 1 of each calendar year beginning in 2016 and ending in 2025, by an amount equal to the least of: (a) _____ shares, (b) 1% of the shares outstanding on the final day of the immediately preceding calendar year and (c) such smaller number of shares as is determined by our board of directors.

Our board of directors or its committee will have authority to interpret the terms of the ESPP and determine eligibility of participants. We expect that the compensation committee will be the initial administrator of the ESPP.

Eligibility

Our employees are eligible to participate in the ESPP if they are customarily employed by us or a participating subsidiary for more than 20 hours per week and more than five months in any calendar year. However, an employee may not be granted rights to purchase stock under our ESPP if such employee, immediately after the grant, would own (directly or through attribution) stock possessing 5% or more of the total combined voting power or value of all classes of our common or other class of stock.

Grant of Rights

The ESPP is intended to qualify under Section 423 of the Internal Revenue Code and stock will be offered under the ESPP during offering periods. The length of the offering periods under the ESPP will be determined by the plan administrator and may be up to 27 months long. Employee payroll deductions will be used to purchase shares on each purchase date during an offering period. The purchase dates for each offering period will be the final trading day in each offering period. Offering periods under the ESPP will commence when determined by the plan administrator. The plan administrator may, in its discretion, modify the terms of future offering periods.

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The ESPP permits participants to purchase common stock through payroll deductions of up to _____ % of their eligible compensation, which includes a participant's gross base compensation for services to us, including overtime payments and excluding sales commissions, incentive compensation, bonuses, expense reimbursements, fringe benefits and other special payments. The plan administrator will establish a maximum number of shares that may be purchased by a participant during any offering period, which, in the absence of a contrary designation, will be _____ shares. In addition, no employee will be permitted to accrue the right to purchase stock under the ESPP at a rate in excess of \$25,000 worth of shares during any calendar year during which such a purchase right is outstanding (based on the fair market value per share of our common stock as of the first day of the offering period).

On the first trading day of each offering period, each participant will automatically be granted an option to purchase shares of our common stock. The option will expire at the end of the applicable offering period, and will be exercised at that time to the extent of the payroll deductions accumulated during the offering period. The purchase price of the shares will be 85% of the lower of the fair market value of our common stock on the first trading day of the offering period or on the purchase date, which will be the final trading day of the offering period. Participants may voluntarily end their participation in the ESPP at any time at least one week prior to the end of the applicable offering period, and will be paid their accrued payroll deductions that have not yet been used to purchase shares of common stock. Participation ends automatically upon a participant's termination of employment.

A participant may not transfer rights granted under the ESPP other than by will, the laws of descent and distribution or as otherwise provided under the ESPP.

Certain Transactions

In the event of certain transactions or events affecting our common stock, such as any stock dividend or other distribution, change in control, reorganization, merger, consolidation or other corporate transaction, the plan administrator will make equitable adjustments to the ESPP and outstanding rights. In addition, in the event of the foregoing transactions or events or certain significant transactions, including a change in control, the plan administrator may provide for (1) either the replacement of outstanding rights with other rights or property or termination of outstanding rights in exchange for cash, (2) the assumption or substitution of outstanding rights by the successor or survivor corporation or parent or subsidiary thereof, if any, (3) the adjustment in the number and type of shares of stock subject to outstanding rights, (4) the use of participants' accumulated payroll deductions to purchase stock on a new purchase date prior to the next scheduled purchase date and termination of any rights under ongoing offering periods or (5) the termination of all outstanding rights.

Plan Amendment

The plan administrator may amend, suspend or terminate the ESPP at any time. However, stockholder approval of any amendment to the ESPP will be obtained for any amendment which increases the aggregate number or changes the type of shares that may be sold pursuant to rights under the ESPP, changes the corporations or classes of corporations whose employees are eligible to participate in the ESPP or changes the ESPP in any manner that would cause the ESPP to no longer be an employee stock purchase plan within the meaning of Section 423(b) of the Internal Revenue Code.

2012 Stock Incentive Plan

Our board of directors and stockholders have approved the 2012 Stock Incentive Plan, or the 2012 Plan, under which we may grant stock options, stock appreciation rights, restricted stock,

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restricted stock units and other stock-based awards to employees, directors and consultants of our company. We have reserved a total of 4,309,653 shares of our common stock for issuance under the 2012 Plan.

Following the effectiveness of the 2015 Plan, we will not make any further grants under the 2012 Plan. However, the 2012 Plan will continue to govern the terms and conditions of the outstanding awards granted under it. As discussed above, we anticipate that shares of our common stock subject to awards granted under the 2012 Plan that are forfeited, lapse unexercised or are settled in cash and which following the effective date of the 2015 Plan are not issued under the 2012 Plan will be available for issuance under the 2015 Plan.

Administration

Our board of directors administers the 2012 Plan and has the authority to: (i) grant awards; (ii) adopt, amend and repeal administrative rules, guidelines and practices relating to the 2012 Plan; (iii) construe and interpret the 2012 Plan and any award agreements thereunder; and (iv) correct any defect, supply any omission or reconcile any inconsistency in the 2012 Plan or any award. The board of directors may delegate its authority under the 2012 Plan to one or more committees or subcommittees.

Types of Awards; Eligibility

The 2012 Plan provides for the grant of stock options, stock appreciation rights, restricted stock, restricted stock units and other stock-based awards to employees, officers, directors and consultants of our company and its qualifying parents and subsidiaries. As of the date of this prospectus, only awards of ISOs and NSOs are outstanding under the 2012 Plan.

Certain Transactions

If certain changes are made in, or events occur with respect to, our common stock, the 2012 Plan and outstanding awards will be appropriately adjusted in the class, number and, as applicable, exercise price of securities as determined by the board of directors. In the event of certain corporate transactions of our company, including a merger, consolidation, sale of our common stock, or our liquidation or dissolution, our board of directors may take the following actions as to options outstanding under the 2012 Plan: (i) provide that such awards will be assumed or substantially equivalent awards substituted, (ii) upon written notice to participants, provide that unexercised awards will terminate unless exercised, (iii) provide that outstanding awards will become exercisable, (iv) if the transaction involves cash payments in exchange for the sale of our common stock, terminate awards for a cash payment equal to the excess of the transaction price of the underlying shares over the exercise price of the applicable award, (v) provide that, in connection with our liquidation or dissolution, awards will convert into a right to receive liquidation proceeds and (vi) any combination of the foregoing.

Amendment and Termination

The board of directors may amend outstanding awards under the 2012 Plan, including by reducing the exercise price per share of the award, without participant consent and may amend, suspend or terminate the 2012 Plan; provided in each case, that any amendment, suspension or termination does not materially or adversely affect the rights of participants holding outstanding awards under the 2012 Plan. Any modification or amendment that requires stockholder approval under applicable law or, with respect to ISOs, Section 422 of the Internal Revenue Code may not be effected without approval by the company's stockholders.

Director Compensation

We have not historically provided annual cash retainers or other compensation to our directors but have, from time to time, granted equity awards to certain directors as compensation for their service on our board of directors. In 2014, we granted each of Dr. Kim and Mr. Kender an option to purchase 75,000 shares of our common stock for their service on our board of directors. Their options have an exercise price per share of \$3.14 and are subject to our standard vesting terms described in “Narrative Disclosure to Summary Compensation Table—Equity-Based Compensation” above. None of our other directors received compensation for serving on our board of directors during 2014.

Drs. Berry and Pomerantz each served as directors and executive officers of our company during 2014. Refer to the Summary Compensation Table and related narrative disclosure above for information regarding the compensation they received from us during 2014.

Effective upon the effectiveness of the registration statement of which this prospectus is a part, our board of directors intends to grant Dr. Dennis Ausiello, who was elected to serve as a member of our board of directors in May 2015, an option to purchase 75,000 shares of our common stock at an exercise price per share equal to the public offering price of our common stock in this offering. These options will vest as to 25% of the underlying shares on April 27, 2016 and as to 6.25% of the underlying shares on the last day of each calendar quarter during the three-year period thereafter, subject to his continued service with us and accelerated vesting immediately prior to a change in control.

In addition, effective upon the effectiveness of the registration statement of which this prospectus is a part, our board of directors intends to grant each of Drs. Afeyan, Cautreels and Kim, and Messrs. Hutt, Kender and Behar, an option to purchase _____ shares of our common stock at an exercise price per share equal to the public offering price of our common stock in this offering. These options will vest in a single installment on the earlier of the day before the next annual meeting of stockholders or the first anniversary of the grant date, subject to the director continuing to serve on our board of directors through that date and accelerated vesting immediately prior to a change in control.

2014 Director Compensation Table

Name	Option Awards (S) ⁽²⁾	Total (\$)
Noubar B. Afeyan, Ph.D.	—	—
Werner Cautreels, Ph.D.	—	—
Peter Barton Hutt	—	—
Lorence H. Kim, M.D.	407,302	407,302
Richard N. Kender	407,302	407,302
Grégory Behar ⁽¹⁾	—	—

(1) Mr. Behar was elected to serve as a member of our board of directors in December 2014.

(2) Represents the aggregate grant date fair value of the option awards granted during 2014 computed in accordance with FASB ASC Topic 718. For a description of the assumptions used in valuing these awards, see Note 10 to our audited consolidated financial statements included elsewhere in this prospectus. The following table shows the number of option awards and unvested stock awards held as of December 31, 2014 by each of our directors who are not NEOs:

Name	Stock Options (#)	Restricted Shares (#)
Noubar B. Afeyan, Ph.D.	—	—
Werner Cautreels, Ph.D.	100,000	—
Peter Barton Hutt	50,000	6,250
Lorence H. Kim, M.D.	75,000	—
Richard N. Kender	75,000	—
Grégory Behar	—	—

Following this offering, we expect to implement a compensation program for our non-employee directors under which each non-employee director will receive the following amounts for their services on our board of directors:

- an option to purchase 30,000 shares of our common stock upon the director’s initial election or appointment to our board of directors that occurs after our initial public offering;

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- if the director has served on our board of directors for at least six months as of the date of an annual meeting of stockholders, an option to purchase 15,000 shares of our common stock on the date of the annual meeting;
- an annual director fee of \$35,000, or if the director serves as chairman of our board of directors or lead director, an annual director fee of \$20,000; and
- if the director serves on a committee of our board of directors, an additional annual fee as follows:
 - chairman of the audit committee—\$15,000;
 - audit committee member other than the chairman—\$7,500;
 - chairman of the compensation committee—\$10,000;
 - compensation committee member other than the chairman—\$5,000;
 - chairman of the nominating and corporate governance committee—\$7,000; and
 - nominating and corporate governance committee member other than the chairman—\$3,500.

Stock options granted to our non-employee directors under the program will have an exercise price equal to the fair market value of our common stock on the date of grant and will expire ten years after the date of grant. The stock options granted upon a director's initial election or appointment will vest in four annual installments following the date of grant. The stock options granted annually to directors will vest in a single installment on the earlier of the day before the next annual meeting of stockholders or the first anniversary of the date of grant. In addition, all unvested stock options will vest in full upon the occurrence of a change in control.

Director fees under the program will be payable in arrears in four equal quarterly installments not later than the 15th day following the final day of each fiscal quarter, provided that the amount of each payment will be prorated for any portion of a quarter that a director is not serving on our board of directors and no fee will be payable in respect of any period prior to the effective date of the registration statement of which this prospectus is a part.

Each member of our board of directors is entitled to be reimbursed for reasonable travel and other expenses incurred in connection with attending meetings of the board of directors and any committee of the board of directors on which he or she serves.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The following includes a summary of transactions since January 1, 2012 to which we have been a party in which the amount involved exceeded or will exceed \$120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under “Executive and Director Compensation.” We also describe below certain other transactions with our directors, executive officers and stockholders.

Preferred Stock Financings

Series A Preferred Stock Financing. In June 2012, we issued and sold to entities affiliated with Flagship Ventures in private placements an aggregate of 6,329,114 shares of our Series A preferred stock at a purchase price of \$0.79 per share, for aggregate consideration of approximately \$5.0 million, and issued 1,901,883 shares of our Series A preferred stock upon the conversion of convertible debt and accrued interest totaling \$1.5 million.

Series A-2 Preferred Stock Financing. In November 2012, we issued and sold to investors in a private placement an aggregate of 2,247,192 shares of our Series A-2 preferred stock at a purchase price of \$1.78 per share, for aggregate consideration of approximately \$4.0 million.

Series B Preferred Stock Financing. In May 2014, we issued and sold to investors in private placements an aggregate of 4,831,359 shares of our Series B preferred stock at a purchase price of \$2.20 per share, for aggregate consideration of approximately \$10.6 million.

The following table sets forth the aggregate number of these securities acquired by our directors, executive officers and the listed holders of more than 5% of our capital stock. Each share of our preferred stock identified in the following table will convert into one share of common stock in connection with this offering.

Participants⁽¹⁾	Series A	Series A-2	Series B
5% or Greater Stockholders			
Entities affiliated with Flagship Ventures Funds ⁽²⁾	8,230,997	1,123,596	2,272,727
Enso Ventures 2 Limited	—	1,123,596	681,818
Directors and Executive Officers			
Roger J. Pomerantz, M.D.	—	—	22,727
John Aunins, Ph.D.	—	—	34,090
David N. Cook, Ph.D.	—	—	45,454

(1) Additional details regarding these stockholders and their equity holdings are provided under the caption “Principal Stockholders.”

(2) Flagship Ventures Funds consists of Flagship VentureLabs IV LLC, Flagship Ventures Fund IV, L.P., Flagship Ventures Fund IV-Rx, L.P. and Flagship Ventures Fund 2007 L.P.

The following directors are associated with our principal stockholders as indicated in the table below:

Director	Principal Stockholder
Noubar B. Afeyan, Ph.D.	Flagship Ventures Funds
David A. Berry, M.D., Ph.D. ⁽¹⁾	Flagship Ventures Funds
Roger J. Pomerantz, M.D.	Flagship Ventures Funds

(1) Dr. Berry served on our board of directors from March 2012 to May 2015.

Services Agreement

In October 2010, we entered into a services agreement with Flagship Ventures Management, Inc., or Flagship Management, an affiliate of Flagship Ventures, under which Flagship Management provides us with personnel, advisory and administrative services on an as-needed basis. From October 19, 2010 to May 13, 2015, we paid Flagship Management an aggregate of \$1.7 million for services provided under the services agreement, inclusive of the services provided by Dr. Berry, who served on our board of directors from March 2012 to May 2015 and as our Interim President and Chief Executive Officer from March 29, 2013 through May 30, 2014.

Standstill Agreement

In December 2014, in connection with the sale to Nestlé Health Science US Holdings, Inc., or Nestlé, of shares of our Series D preferred stock, Nestlé agreed that it would not increase its ownership of our securities or acquire our assets without the prior consent of our board of directors. Nestlé also agreed not to participate in any tender or exchange offer for our securities; any merger or other business combination involving us; any recapitalization, restructuring, liquidation, dissolution, or other extraordinary transaction involving us; or take action to seek representation on our board of directors or otherwise influence our management. Except for confidential discussions with our board of directors, Nestlé is also prohibited from entering into any discussions or arrangements with third parties regarding these restrictions. The restrictions under the standstill agreement terminate upon the earlier of December 19, 2019 or the third anniversary of the consummation of this offering. As long as no senior executive from Nestlé is serving on our board of directors at the time, these standstill provisions also terminate upon a public announcement by us of the initiation of a sale process or of an offer from, or public attempt by, a third party to acquire all or a substantial portion of our securities or assets.

Investors' Rights Agreement

We entered into an amended and restated investors' rights agreement in December 2014 with the holders of our preferred stock, including entities with which certain of our directors are affiliated. This agreement provides for certain rights relating to the registration of such preferred stockholders' shares of common stock and common stock issuable upon conversion of their preferred stock and a right of first refusal to purchase future securities sold by us. See "Description of Capital Stock — Registration Rights" for additional information.

Voting Agreement

We entered into an amended and restated voting agreement in December 2014, which was further amended in April 2015, by and among us and certain of our stockholders, pursuant to which the following directors were elected to serve as members on our board of directors and, as of the date of this prospectus, continue to so serve: Noubar B. Afeyan, Dennis A. Ausiello, Grégory Behar, Werner Cautreels, Peter Barton Hutt, Richard N. Kender, Lorence H. Kim and Roger J. Pomerantz. Pursuant to the voting agreement, Dr. Afeyan was initially selected to serve on our board of directors as the representative of holders of our preferred stock, as designated by Flagship Ventures Fund IV, L.P., Flagship Ventures Fund IV-Rx, L.P. and Flagship Ventures Fund 2007, L.P. Mr. Behar was initially selected to serve on our board of directors by Nestlé Health Science US Holdings, Inc. Dr. Pomerantz was initially selected to serve on our board of directors in his capacity as our Chief Executive Officer, and his employment agreement provides that he will serve as a director so long as he serves as our Chief Executive Officer. Drs. Ausiello, Cautreels and Kim and Messrs. Hutt and Kender were initially selected to serve on our board of directors as independent directors, as designated by the holders of preferred stock.

The voting agreement will terminate upon the closing of this offering, and members previously elected to our board of directors pursuant to this agreement will continue to serve as directors until they

resign, are removed or their successors are duly elected by the holders of our common stock. The composition of our board of directors after this offering is described in more detail under “Management—Board Composition and Election of Directors.”

Employment Agreements

We have entered into employment agreements with our named executive officers. For more information regarding the agreements with our named executive officers, see “Executive and Director Compensation — Employment Agreements.”

Indemnification Agreements

We intend to enter into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us or will require us to indemnify each director (and in certain cases their related venture capital funds) and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses, such as attorneys’ fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person’s services as a director or executive officer.

Stock Option Grants to Executive Officers and Directors

We have granted stock options to our executive officers and certain of our directors as more fully described in the section titled “Executive and Director Compensation.”

Policies and Procedures for Related Person Transactions

Our board of directors has adopted a written related person transaction policy, to be effective upon the closing of this offering, setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy will cover, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we were, are, or will be a participant, where the amount involved exceeds \$120,000 in any fiscal year and a related person had, has or will have a direct or indirect material interest, including without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our audit committee is tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm’s length transaction and the extent of the related person’s interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock, as of May 13, 2015, and as adjusted to reflect the sale of shares of common stock in this offering, by:

- each person or group of affiliated persons known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

The number of shares beneficially owned by each stockholder is determined under rules issued by the Securities and Exchange Commission. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. Applicable percentage ownership is based on 30,403,502 shares of common stock outstanding as of May 13, 2015, assuming the conversion of all of our preferred stock into common stock in connection with this offering. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options, warrants or other rights held by such person that are currently exercisable or will become exercisable within 60 days of May 13, 2015 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless noted otherwise, the address of all listed stockholders is 215 First Street, Cambridge, Massachusetts 02142. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

<u>Name of Beneficial Owner</u>	<u>Number of Shares Beneficially Owned Prior to Offering</u>	<u>Percentage of Shares Beneficially Owned</u>	
		<u>Prior to Offering</u>	<u>After Offering</u>
5% or Greater Stockholders			
Entities affiliated with Flagship Ventures Funds ⁽¹⁾	16,627,320	54.7%	
Nestlé Health Science US Holdings, Inc. ⁽²⁾	5,555,555	18.3%	
Entities affiliated with Fidelity Management & Research Company ⁽³⁾	2,466,457	8.1%	
Enso Ventures 2 Limited	1,805,414	5.9%	
Named Executive Officers and Directors			
Roger J. Pomerantz, M.D. ⁽⁴⁾	656,399	2.1%	
Noubar B. Afeyan, Ph.D. ⁽¹⁾	16,627,320	54.7%	
Dennis A. Ausiello, M.D.	—	—	
Grégory Behar	—	—	
Werner Cautreels, Ph.D. ⁽⁵⁾	62,500	*	
Peter Barton Hutt ⁽⁶⁾	78,125	*	
Richard N. Kender	—	—	
Loren H. Kim, M.D.	—	—	
David N. Cook, Ph.D. ⁽⁷⁾	270,610	*	
Eric D. Shaff	—	—	
All executive officers and directors as a group (12 persons) ⁽⁸⁾	17,916,544	57.5%	

* Less than 1%.

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- (1) Consists of (a) 3,055,556 shares of common stock held by Flagship VentureLabs IV LLC ("Flagship VentureLabs"), (b) 1,944,444 shares of common stock held by Nestlé Health Science US Holdings, Inc. for which Flagship VentureLabs exercises voting control under certain circumstances, which voting control terminates upon the closing of the company's initial public offering, (c) 8,822,420 shares of common stock held by Flagship Ventures Fund IV, L.P. ("Flagship Fund IV"), (d) 2,205,603 shares of common stock held by Flagship Ventures Fund IV-Rx, L.P. ("Flagship Fund IV-Rx") and (e) 599,297 shares of common stock held by Flagship Ventures Fund 2007, L.P. ("Flagship Fund 2007" and together with Flagship VentureLabs, Flagship Fund IV and Flagship Fund IV-Rx, the "Flagship Funds"). Flagship Fund IV is a member of Flagship VentureLabs and also serves as its manager. The general partner of each of Flagship Fund IV and Flagship Fund IV-Rx is Flagship Ventures Fund IV General Partner LLC ("Flagship Fund IV GP"), and the general partner of Flagship Fund 2007 is Flagship Ventures 2007 General Partner LLC ("Flagship Fund 2007 GP" and together with Flagship Fund IV GP, the "Flagship General Partners"). Noubar Afeyan is a director of Seres Therapeutics and a member of the Flagship General Partners. In addition, Dr. Afeyan serves as a managing member of the Flagship General Partners and may be deemed to possess voting and investment control over the shares held by the Flagship Funds. Neither of the Flagship General Partners directly own any of the shares held by the Flagship Funds, and each of the Flagship General Partners and Dr. Afeyan disclaims beneficial ownership of such shares except to the extent of its or his pecuniary interest therein. The mailing address of the Flagship Funds is One Memorial Drive, 7th Floor, Cambridge, MA 02142.
- (2) Nestlé Health Science US Holdings, Inc. is a wholly owned, indirect subsidiary of Nestlé S.A., a publicly traded company. The address for Nestlé Health Science US Holdings, Inc. is c/o Nestlé USA, Inc. 383 Main Ave, 5th Floor, Norwalk, CT 06851.
- (3) Consists of (a) 1,292,035 shares of common stock held by Fidelity Select Portfolios: Biotechnology Fund, (b) 352,270 shares of common stock held by Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, (c) 107,186 shares of common stock held by Fidelity Growth Company Comingled Pool, (d) 142,139 shares of common stock held by Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund and (e) 572,827 shares of common stock held by Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund. These accounts are managed by direct or indirect subsidiaries of FMR LLC. Edward C. Johnson 3d is a Director and the Chairman of FMR LLC and Abigail P. Johnson is a Director, the Vice Chairman and the President of FMR LLC. Members of the family of Edward C. Johnson 3d, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B stockholders have entered into a stockholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act ("Fidelity Funds") advised by Fidelity Management & Research Company ("FMR Co"), a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Boards of Trustees. FMR Co carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees.
- (4) Includes 633,672 shares of common stock which Dr. Pomerantz has the right to acquire pursuant to outstanding stock options which are or will be immediately exercisable within 60 days of May 13, 2015.
- (5) Consists of 62,500 shares of common stock which Dr. Cautreels has the right to acquire pursuant to outstanding stock options which are or will be immediately exercisable within 60 days of May 13, 2015.
- (6) Includes 28,125 shares of common stock which Mr. Hutt has the right to acquire pursuant to outstanding stock options which are or will be immediately exercisable within 60 days of May 13, 2015.
- (7) Includes 40,937 shares of common stock which Dr. Cook has the right to acquire pursuant to outstanding stock options which are or will be immediately exercisable within 60 days of May 13, 2015.
- (8) Consists of (a) 16,929,720 shares of common stock and (b) 765,234 shares of common stock which the holders have the right to acquire pursuant to outstanding stock options which are or will be immediately exercisable within 60 days of May 13, 2015.

DESCRIPTION OF CAPITAL STOCK

General

The following description summarizes some of the terms of our restated certificate of incorporation and restated bylaws that will become effective upon the closing of this offering, our outstanding warrants, our amended and restated investors' rights agreement and of the General Corporation Law of the State of Delaware. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to our restated certificate of incorporation, restated bylaws, warrants and amended and restated investors' rights agreement, copies of which have been or will be filed as exhibits to the registration statement of which this prospectus is a part, as well as the relevant provisions of the General Corporation Law of the State of Delaware. The description of our common stock and preferred stock reflects changes to our capital structure that will occur in connection with this offering.

Following the closing of this offering, our authorized capital stock will consist of 200,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.

As of May 13, 2015, we had issued and outstanding:

- 7,536,515 shares of our common stock held of record by 23 stockholders;
- 8,230,997 shares of our Series A preferred stock that are convertible into 8,230,997 shares of our common stock as of such date;
- 2,247,192 shares of our Series A-2 preferred stock that are convertible into 2,247,192 shares of our common stock as of such date;
- 4,831,359 shares of our Series B preferred stock that are convertible into 4,831,359 shares of our common stock as of such date;
- 3,946,328 shares of our Series C preferred stock that are convertible into 3,946,328 shares of our common stock as of such date; and
- 3,611,111 shares of our Series D preferred stock that are convertible into 3,611,111 shares of our common stock as of such date.

In connection with this offering, all of the outstanding shares of our preferred stock will automatically convert into an aggregate of 22,866,987 shares of our common stock.

Common Stock

As of May 13, 2015, 30,403,502 shares of our common stock were held of record by 50 stockholders, assuming the conversion of all of our outstanding shares of preferred stock into shares of our common stock.

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Subject to the supermajority votes for some matters, other matters shall be decided by the affirmative vote of our stockholders having a majority in voting power of the votes cast by the stockholders present or represented and voting on such matter. Our restated certificate of incorporation and restated bylaws also provide that our directors may be removed only for cause and

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only by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock entitled to vote thereon. In addition, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock entitled to vote thereon is required to amend or repeal, or to adopt any provision inconsistent with, several of the provisions of our restated certificate of incorporation. See below under “—Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws—Amendment of Restated Certificate of Incorporation.” Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of preferred stock that we may designate and issue in the future.

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. Our outstanding shares of common stock are, and the shares offered by us in this offering will be, when issued and paid for, validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our restated certificate of incorporation that will become effective upon the closing of this offering, our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding, and we have no present plans to issue any shares of preferred stock.

Options

As of May 13, 2015, options to purchase 4,014,246 shares of our common stock were outstanding under our 2012 Stock Incentive Plan.

Warrants

On June 6, 2014, we issued two warrants to the Mayo Foundation for Medical Education and Research, or the Mayo Foundation, in connection with our research and option agreement with the Mayo Foundation. In each case, the warrant, unless earlier exercised or terminated, terminates upon the closing of this offering. The first warrant provided the Mayo Foundation a right to purchase 454,545 shares of our common stock at a purchase price of \$0.01 per share. On April 29, 2015, the Mayo Foundation exercised the first warrant and was issued 454,545 shares of our common stock. The second warrant is contingent upon the accomplishment of certain milestones. As of May 13, 2015, the Mayo Foundation had not accomplished any of the milestones, and, therefore, there were no shares of our common stock exercisable pursuant to this warrant.

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In connection with our loan and security agreement, we issued a warrant to Comerica Bank, or the Comerica Warrant, that is exercisable for 92,127 shares of Series A-2 preferred stock at an exercise price per share of \$1.78. On May 16, 2014, Comerica Bank transferred this warrant to Comerica Ventures Incorporated. Upon the conversion of the Series A-2 preferred stock into common stock in connection with this offering, the warrant will become exercisable for 92,127 shares of common stock at an exercise price per share of \$1.78. If unexercised, the warrant will expire on September 9, 2023.

Registration Rights

Upon the closing of this offering, holders of 22,959,114 shares of our common stock as of May 13, 2015, including shares issuable upon the exercise of the Comerica Warrant, or their transferees will be entitled to the following rights with respect to the registration of such shares for public resale under the Securities Act, pursuant to the amended and restated investors' rights agreement by and among us and certain of our stockholders, or the investors' rights agreement, until such shares can otherwise be sold without restriction under Rule 144, or until the rights otherwise terminate pursuant to the terms of the investors' rights agreement. The registration of shares of common stock as a result of the following rights being exercised would enable holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective.

Demand Registration Rights

If at any time beginning 180 days after the effective date of the registration statement of which this prospectus is a part the holders of a majority of the registrable securities request in writing that we effect a registration with respect to all or part of their registrable securities, we may be required to register all or part of the registrable securities then outstanding. We are obligated to effect at most two registrations in response to these demand registration rights. If the holders requesting registration intend to distribute their shares by means of an underwriting, the managing underwriter of such offering will have the right to limit the numbers of shares to be underwritten for reasons related to the marketing of the shares.

Piggyback Registration Rights

If at any time after this offering we propose to register any shares of our common stock under the Securities Act, subject to certain exceptions, the holders of registrable securities will be entitled to notice of the registration and to include their shares of registrable securities in the registration. If our proposed registration involves an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Form S-3 Registration Rights

If the holders of at least 30% of the registrable securities then outstanding request in writing that we effect a registration with respect to registrable securities at an aggregate price to the public in the offering of at least \$5,000,000, and we are entitled under the Securities Act to register our shares on a registration statement on Form S-3, we will be required to effect such registration. We will not be required to effect a registration pursuant to these Form S-3 registration rights if, within a given six-month period, we have already effected two registrations on Form S-3 for the holders of registrable securities.

Expenses

Ordinarily, other than underwriting discounts and commissions, we will be required to pay all expenses incurred by us related to any registration effected pursuant to the exercise of these registration rights. These expenses may include all registration and filing fees, printing expenses, fees and disbursements of our counsel, reasonable fees and disbursements of a counsel for the selling security holders and blue sky fees and expenses.

Termination of Registration Rights

The registration rights terminate upon the earlier of five years after the closing of this offering, or, with respect to the registration rights of an individual holder, when the holder can sell all of such holder's registrable securities in a three-month period without restriction under Rule 144 under the Securities Act.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Some provisions of Delaware law, our restated certificate of incorporation and our restated bylaws could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interest, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Undesignated Preferred Stock

The ability of our board of directors, without action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with voting or other rights or preferences as designated by our board of directors could impede the success of any attempt to effect a change in control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Stockholder Meetings

Our restated bylaws provide that a special meeting of stockholders may be called only by our chairman of the board, chief executive officer or president (in the absence of a chief executive officer), or by a resolution adopted by a majority of our board of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our restated bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Elimination of Stockholder Action by Written Consent

Our restated certificate of incorporation eliminates the right of stockholders to act by written consent without a meeting.

Staggered Board

Our board of directors is divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by our stockholders. For more information on the classified board, see “Management—Board Composition and Election of Directors.” This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Removal of Directors

Our restated certificate of incorporation provides that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of the holders of at least two-thirds in voting power of the outstanding shares of stock entitled to vote in the election of directors.

Stockholders Not Entitled to Cumulative Voting

Our restated certificate of incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the General Corporation Law of the State of Delaware, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this law may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors.

Choice of Forum

Our restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware or our restated certificate of incorporation or restated bylaws; (4) any action to interpret, apply, enforce or determine

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the validity of our restated certificate of incorporation or restated bylaws; or (5) any action asserting a claim governed by the internal affairs doctrine. Our restated certificate of incorporation also provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision. It is possible that a court of law could rule that the choice of forum provision contained in our restated certificate of incorporation is inapplicable or unenforceable if it is challenged in a proceeding or otherwise.

Amendment of Restated Certificate of Incorporation

The amendment of any of the above provisions in our restated certificate of incorporation, except for the provision making it possible for our board of directors to issue preferred stock and the provision prohibiting cumulative voting, would require approval by holders of at least two-thirds in voting power of the outstanding shares of stock entitled to vote thereon.

The provisions of Delaware law, our restated certificate of incorporation and our restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interest.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company, LLC.

National Securities Exchange Listing

We have applied to have our common stock listed on The NASDAQ Global Market under the symbol "MCRB."

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there was no public market for our common stock. Future sales of substantial amounts of common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock.

Upon the closing of this offering, we will have outstanding an aggregate of _____ shares of common stock, based on our shares outstanding as of May 13, 2015 and assuming the issuance of _____ shares of common stock offered by us in this offering and the automatic conversion of all outstanding shares of our preferred stock into 22,866,987 shares of our common stock. Of these shares, all shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by our “affiliates,” as that term is defined in Rule 144 under the Securities Act, whose sales would be subject to the Rule 144 resale restrictions described below, other than the holding period requirement.

The remaining 30,403,502 shares of common stock will be “restricted securities,” as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below. We expect that substantially all of these shares will be subject to the 180-day lock-up period under the lock-up agreements described below. Upon expiration of the lock-up period, we estimate that approximately _____ shares will be available for sale in the public market, subject in some cases to applicable volume limitations under Rule 144.

In addition, of the 4,014,246 shares of our common stock that were subject to stock options outstanding as of May 13, 2015, options to purchase 546,909 shares of common stock were vested as of May 13, 2015 and, upon exercise, these shares will be eligible for sale subject to the lock-up agreements described below and Rules 144 and 701 promulgated under the Securities Act.

Lock-Up Agreements

We and each of our directors and executive officers and holders of substantially all of our outstanding capital stock, have agreed that, without the prior written consent of Goldman, Sachs & Co. and BofA Merrill Lynch, on behalf of the underwriters, we and they will not, subject to limited exceptions described below, during the period ending 180 days after the date of this prospectus:

- offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, or publicly disclose an intention to take any such actions with respect to, any shares of our common stock, or any options or warrants to purchase any shares of our common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of our common stock, whether now owned or hereinafter acquired, owned directly or indirectly; or
- request, make any demand for or exercise any right with respect to, the registration of any of our common stock or any security convertible into or exercisable or exchangeable for our common stock,

whether any transaction described above is to be settled by delivery of our common stock or such other securities, in cash or otherwise.

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In the case of our officers, directors and stockholders, these lock-up restrictions are subject to certain exceptions, including transfers (i) made as bona fide gifts; (ii) to any immediate family member or a trust or other legal entity; (iii) by will or intestacy; (iv) for the primary purpose of satisfying exercise price and/or tax withholding obligations upon the vesting or exercise of an option, or other award granted under a stock incentive plan or stock purchase plan of the company or the conversion of exercise of a warrant; (v) pursuant to our 2012 Stock Incentive Plan, to family members through gifts or domestic relations orders or to an executor or guardian upon death or disability; (vi) acquired in open market transactions; (vii) as part of a distribution, transfer or disposition without consideration to a holder's limited or general partners; (viii) due to repurchases by us in connection with the termination of employment or other service relationship or the failure to meet certain conditions; (ix) in connection with the conversion of any convertible security into, or the exercise of any option or warrant for, our common stock in connection with the consummation of this offering; (x) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction involving a change of control; and (xi) in connection with the establishment of a trading plan pursuant to 10b5-1 under the Securities Exchange Act.

Upon the expiration of the applicable lock-up periods, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Rule 144

Affiliate Resales of Restricted Securities

In general, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours, or who was an affiliate at any time during the 90 days before a sale, who has beneficially owned shares of our common stock for at least six months would be entitled to sell in "broker's transactions" or certain "riskless principal transactions" or to market makers, a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately _____ shares immediately after this offering; or
- the average weekly trading volume in our common stock on The NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Affiliate resales under Rule 144 are also subject to the availability of current public information about us. In addition, if the number of shares being sold under Rule 144 by an affiliate during any three-month period exceeds 5,000 shares or has an aggregate sale price in excess of \$50,000, the seller must file a notice on Form 144 with the Securities and Exchange Commission and _____ concurrently with either the placing of a sale order with the broker or the execution directly with a market maker.

Non-Affiliate Resales of Restricted Securities

In general, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is not an affiliate of ours at the time of sale, and has not been an affiliate at any time during the three months preceding a sale, and who has beneficially owned shares of our common stock for at least six months but less than a year, is entitled to sell such shares subject only to the availability of current public information about us. If such person has held our shares for at least one year, such person can resell under Rule 144(b)(1) without regard to any Rule 144 restrictions, including the 90-day public company requirement and the current public information requirement.

Non-affiliate resales are not subject to the manner of sale, volume limitation or notice filing provisions of Rule 144.

Rule 701

In general, under Rule 701, any of an issuer's employees, directors, officers, consultants or advisors who purchases shares from the issuer in connection with a compensatory stock or option plan or other written agreement before the effective date of a registration statement under the Securities Act is entitled to sell such shares 90 days after such effective date in reliance on Rule 144. An affiliate of the issuer can resell shares in reliance on Rule 144 without having to comply with the holding period requirement, and non-affiliates of the issuer can resell shares in reliance on Rule 144 without having to comply with the current public information and holding period requirements.

The Securities and Exchange Commission has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Securities Exchange Act, along with the shares acquired upon exercise of such options, including exercises after an issuer becomes subject to the reporting requirements of the Securities Exchange Act.

Equity Plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under our stock plans. We expect to file the registration statement covering shares offered pursuant to our stock plans shortly after the date of this prospectus, permitting the resale of such shares by nonaffiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market, subject to compliance with the resale provisions of Rule 144 and expiration of or release from the lock-up agreements described above.

Registration Rights

Upon the closing of this offering, the holders of 22,959,114 shares of common stock, which includes all of the shares of common stock issuable upon the automatic conversion of our preferred stock in connection with this offering and shares issuable upon the exercise of the Comerica Warrant, or their transferees will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration statement, except for shares purchased by affiliates. See "Description of Capital Stock—Registration Rights" for additional information. Shares covered by a registration statement will be eligible for sale in the public market upon the expiration or release from the terms of the lock-up agreement.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax consequences. The consequences of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, judicial decisions and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or IRS, in effect as of the date of this offering. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a non-U.S. holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to non-U.S. holders that hold our common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a non-U.S. holder’s particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to non-U.S. holders subject to particular rules, including, without limitation:

- U.S. expatriates and certain former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies and other financial institutions;
- real estate investment trusts or regulated investment companies;
- brokers, dealers or traders in securities or currencies;
- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- S corporations, partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes, or investors in any such entities;
- tax-exempt or governmental organizations;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- persons for whom our stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code; and
- tax-qualified retirement plans.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS LEGAL OR TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER OTHER U.S. FEDERAL TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a “non-U.S. holder”

For purposes of this discussion, a “non-U.S. holder” is any beneficial owner of our common stock that is neither a “U.S. person,” a partnership, or an entity disregarded as separate from its owner, each for U.S. federal income tax purposes. A U.S. person is any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has made a valid election under applicable Treasury Regulations to continue to be treated as a U.S. person.

Distributions

As described in the section titled “Dividend Policy,” we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions on our common stock, such distributions of cash or property on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a non-U.S. holder’s adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under “Sale or Other Taxable Disposition.”

Subject to the discussion below on effectively connected income, dividends paid to a non-U.S. holder of our common stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the non-U.S. holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A non-U.S. holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a non-U.S. holder are effectively connected with the non-U.S. holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such dividends are attributable), the non-U.S. holder will be exempt from the U.S. federal withholding tax

described above. To claim the exemption, the non-U.S. holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A non-U.S. holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or Other Taxable Disposition

Subject to the discussions below on backup withholding and foreign accounts, a non-U.S. holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such gain is attributable);
- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest, or USRPI, by reason of our status as a U.S. real property holding corporation, or a "USRPHC", for U.S. federal income tax purposes.

Gain described in the first bullet point above will generally be subject to U.S. federal income tax on a net income basis at the regular graduated U.S. federal income tax rates. A non-U.S. holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) of such effectively connected gain, as adjusted for certain items.

A non-U.S. holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on any gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder (even though the individual is not considered a resident of the United States) provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we are not currently and do not anticipate becoming a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our other business assets and our non-U.S. real property interests, however, there can be no assurance we are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a non-U.S. holder of our common stock will not be subject to U.S. federal income tax if such class of stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such non-U.S. holder owned, actually or constructively, 5% or less of such class of our stock throughout the shorter of the five-year period ending on the date of the sale or other disposition or the non-U.S. holder's holding period for such stock; if the foregoing exception does not apply, then if we are or were to become a USRPHC a purchaser may be required to withhold 10% of the proceeds payable to a non-U.S. holder from a sale of our common stock and such non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code).

Non-U.S. holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Payments of dividends on our common stock will not be subject to backup withholding provided the applicable withholding agent does not have actual knowledge or reason to know such holder is a U.S. person and the holder either certifies its non-U.S. status, such as by providing a valid IRS Form W-8BEN, W-8BEN-E, or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock paid to the non-U.S. holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a U.S. person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of these information returns that are filed with the IRS may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a non-U.S. holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under the Foreign Account Tax Compliance Act, or FATCA, on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

The withholding provisions described above will generally apply to payments of dividends on our common stock and will apply to payments of gross proceeds from the sale or other disposition of such stock on or after January 1, 2017. Because we may not know the extent to which a distribution is a dividend for U.S. federal income tax purposes at the time it is made, for purposes of these withholding rules we may treat the entire distribution as a dividend. Prospective investors should consult their tax advisors regarding the potential application of these withholding provisions.

UNDERWRITING

We and the underwriters named below will enter into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter shall severally agree to purchase the number of shares indicated in the following table. Goldman, Sachs & Co. and Merrill Lynch, Pierce, Fenner & Smith Incorporated are the representatives of the underwriters.

<u>Underwriters</u>	<u>Number of Shares</u>
Goldman, Sachs & Co.	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Leerink Partners LLC	
Canaccord Genuity Inc.	
Total	

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

The underwriters have an option to buy up to an additional _____ shares from us to cover sales by the underwriters of a greater number of shares than the total number set forth in the table above. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid by us to the underwriters. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase _____ additional shares.

<u>Paid by the Company</u>	<u>No Exercise</u>	<u>Full Exercise</u>
Per Share	\$	\$
Total	\$	\$

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to \$ _____ per share from the initial public offering price. After the initial offering of the shares, the representatives may change the offering price and the other selling terms. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We and our officers, directors and holders of substantially all of our outstanding capital stock have agreed with the underwriters, subject to certain exceptions, that we and they will not dispose of or hedge any of our or their capital stock or securities convertible into or exchangeable for shares of common stock during the period ending 180 days after the date of this prospectus, except with the prior written consent of the representatives. For more information, see "Shares Eligible for Future Sale—Lock Up Agreements."

Prior to the offering, there has been no public market for our shares. The initial public offering price will be negotiated among us and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be our historical performance, estimates of our business potential and earnings prospects, an assessment of our management and the consideration of the above factors in relation to market valuation of companies in related businesses.

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An application has been made to list our common stock on The NASDAQ Global Market under the symbol “MCRB.”

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering, and a short position represents the amount of such sales that have not been covered by subsequent purchases. A “covered short position” is a short position that is not greater than the amount of additional shares for which the underwriters’ option described above may be exercised. The underwriters may cover any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to cover the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option described above. “Naked” short sales are any short sales that create a short position greater than the amount of additional shares for which the option described above may be exercised. The underwriters must cover any such naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the company’s stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. The underwriters are not required to engage in these activities and may end any of these activities at any time. These transactions may be effected on The NASDAQ Global Market, in the over-the-counter market or otherwise.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

We estimate that our share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately \$ million. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority (in an amount not to exceed \$30,000).

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the issuer and to persons and entities with relationships with the issuer, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the issuer (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the issuer. The underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, or a Relevant Member State, each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, it has not made and will not make an offer of shares to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares to the public in that Relevant Member State at any time:

- (a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- (b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- (c) to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or
- (d) in any other circumstances which do not require the publication by the Issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an “offer of shares to the public” in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Each underwriter has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act, or FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

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- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

Hong Kong

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for six months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan, or the Financial Instruments and Exchange Law, and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Latham & Watkins LLP. Certain legal matters will be passed upon for the underwriters by Ropes & Gray LLP.

EXPERTS

The financial statements as of December 31, 2014 and 2013 and for each of the three years in the period ended December 31, 2014 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. Upon the closing of this offering, we will be required to file periodic reports, proxy statements, and other information with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934. You may read and copy this information at the Public Reference Room of the Securities and Exchange Commission, 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the Securities and Exchange Commission at 1-800-SEC-0330. The Securities and Exchange Commission also maintains an Internet website that contains reports, proxy statements and other information about registrants, like us, that file electronically with the Securities and Exchange Commission. The address of that site is www.sec.gov.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Seres Therapeutics, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations and comprehensive loss, of convertible preferred stock and stockholders' deficit and of cash flows present fairly, in all material respects, the financial position of Seres Therapeutics, Inc., formerly known as Seres Health, Inc., and its subsidiary at December 31, 2014 and 2013, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2014 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
April 8, 2015

SERES THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)

	December 31,		March 31,	Pro Forma
	2013	2014	2015 (unaudited)	March 31, 2015 (unaudited)
Assets				
Current assets:				
Cash and cash equivalents	\$ 1,654	\$114,185	\$ 45,045	\$ 45,045
Investments	—	—	59,271	59,271
Prepaid expenses and other current assets	51	58	768	768
Total current assets	1,705	114,243	105,084	105,084
Property and equipment, net	352	1,264	1,313	1,313
Restricted cash	37	139	139	139
Deferred offering costs	—	1,684	2,079	2,079
Deferred financing costs	31	15	13	13
Total assets	<u>\$ 2,125</u>	<u>\$117,345</u>	<u>\$108,628</u>	<u>\$108,628</u>
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)				
Current liabilities:				
Accounts payable	\$ 393	\$ 2,166	\$ 1,109	\$ 1,109
Accrued expenses and other current liabilities	263	1,737	1,126	1,126
Notes payable, current portion	400	1,200	1,200	1,200
Total current liabilities	1,056	5,103	3,435	3,435
Notes payable, net of discount	438	1,304	1,016	1,016
Preferred stock warrant liability	164	1,582	1,369	—
Total liabilities	<u>1,658</u>	<u>7,989</u>	<u>5,820</u>	<u>4,451</u>
Commitments and contingencies (Note 12)				
Convertible preferred stock (Series A, A-2, B, C, D and D-1), \$0.001 par value; 11,806,272 shares authorized at December 31, 2013 and 24,348,003 shares authorized at December 31, 2014 and March 31, 2015 (unaudited); 10,478,189 shares issued and outstanding at December 31, 2013 and 22,866,987 shares issued and outstanding at December 31, 2014 and March 31, 2015 (unaudited); aggregate liquidation preference of \$137,283 and \$139,992 at December 31, 2014 and March 31, 2015 (unaudited), respectively; no shares issued or outstanding pro forma at March 31, 2015 (unaudited)	11,583	136,077	136,053	—
Stockholders' equity (deficit):				
Common stock, \$0.001 par value; 24,500,000 shares authorized at December 31, 2013 and 38,000,000 shares authorized at December 31, 2014 and March 31, 2015 (unaudited); 6,855,000, 6,890,250 and 7,081,970 shares issued and outstanding at December 31, 2013 and 2014 and March 31, 2015 (unaudited), respectively; 29,948,957 shares issued and outstanding, pro forma at March 31, 2015 (unaudited)	7	7	7	30
Additional paid-in capital	—	1,104	2,520	139,919
Accumulated other comprehensive income	—	—	31	31
Accumulated deficit	(11,123)	(27,832)	(35,803)	(35,803)
Total stockholders' equity (deficit)	<u>(11,116)</u>	<u>(26,721)</u>	<u>(33,245)</u>	<u>104,177</u>
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	<u>\$ 2,125</u>	<u>\$117,345</u>	<u>\$108,628</u>	<u>\$108,628</u>

The accompanying notes are an integral part of these consolidated financial statements.

SERES THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(In thousands, except share and per share data)

	Year Ended December 31,			Three Months Ended March 31,	
	2012	2013	2014	2014 (unaudited)	2015
Revenue	\$ —	\$ —	\$ —	\$ —	\$ —
Operating expenses:					
Research and development expenses	2,077	4,805	10,718	1,032	5,561
General and administrative expenses	956	1,247	4,364	640	2,606
Total operating expenses	<u>3,033</u>	<u>6,052</u>	<u>15,082</u>	<u>1,672</u>	<u>8,167</u>
Loss from operations	<u>(3,033)</u>	<u>(6,052)</u>	<u>(15,082)</u>	<u>(1,672)</u>	<u>(8,167)</u>
Other income (expense):					
Interest income (expense), net	(93)	(42)	(209)	(37)	(17)
Revaluation of preferred stock warrant liability	—	(8)	(1,418)	20	213
Total other income (expense), net	<u>(93)</u>	<u>(50)</u>	<u>(1,627)</u>	<u>(17)</u>	<u>196</u>
Net loss	<u>(3,126)</u>	<u>(6,102)</u>	<u>(16,709)</u>	<u>(1,689)</u>	<u>(7,971)</u>
Accretion of convertible preferred stock to redemption value	(276)	(875)	(1,291)	(233)	—
Net loss attributable to common stockholders	<u>\$ (3,402)</u>	<u>\$ (6,977)</u>	<u>\$ (18,000)</u>	<u>\$ (1,922)</u>	<u>\$ (7,971)</u>
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (0.59)</u>	<u>\$ (1.09)</u>	<u>\$ (2.67)</u>	<u>\$ (0.29)</u>	<u>\$ (1.15)</u>
Weighted average common shares outstanding, basic and diluted	<u>5,725,120</u>	<u>6,394,916</u>	<u>6,748,037</u>	<u>6,686,389</u>	<u>6,912,725</u>
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)			<u>\$ (0.74)</u>		<u>\$ (0.27)</u>
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)			<u>20,683,511</u>		<u>29,779,712</u>
Other comprehensive income:					
Unrealized gain on investments, net of tax of \$0	—	—	—	—	31
Total other comprehensive income	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>31</u>
Comprehensive loss	<u>\$ (3,126)</u>	<u>\$ (6,102)</u>	<u>\$ (16,709)</u>	<u>\$ (1,689)</u>	<u>\$ (7,940)</u>

The accompanying notes are an integral part of these consolidated financial statements.

SERES THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK
AND STOCKHOLDERS' DEFICIT

(In thousands, except share data)

	Series A, A-2, B, C, D and D-1 Convertible Preferred Stock		Common Stock			Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Deficit
	Shares	Amount	Shares	Par Value	Additional Paid-in Capital			
Balance at December 31, 2011	—	\$ —	2,400,000	\$ 2	\$ —	\$ (981)	\$ —	\$ (979)
Issuance of common stock	—	—	3,000,000	3	—	—	—	3
Issuance of Series A convertible preferred stock, net of issuance costs of \$70	6,329,114	4,930	—	—	—	—	—	—
Conversion of promissory notes and accrued interest into Series A convertible preferred stock	1,901,883	1,502	—	—	—	—	—	—
Issuance of Series A-2 convertible preferred stock	2,247,192	4,000	—	—	—	—	—	—
Issuance of restricted common stock	—	—	2,440,000	2	—	—	—	2
Repurchase of unvested restricted common stock	—	—	(250,000)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	28	—	—	28
Accretion of convertible preferred stock to redemption value	—	276	—	—	(28)	(248)	—	(276)
Net loss	—	—	—	—	—	(3,126)	—	(3,126)
Balance at December 31, 2012	10,478,189	10,708	7,590,000	7	—	(4,355)	—	(4,348)
Repurchase of unvested restricted common stock	—	—	(735,000)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	209	—	—	209
Accretion of convertible preferred stock to redemption value	—	875	—	—	(209)	(666)	—	(875)
Net loss	—	—	—	—	—	(6,102)	—	(6,102)
Balance at December 31, 2013	10,478,189	11,583	6,855,000	7	—	(11,123)	—	(11,116)
Issuance of Series B convertible preferred stock, net of issuance costs of \$71	4,831,359	10,558	—	—	—	—	—	—
Issuance of Series C convertible preferred stock, net of issuance costs of \$187	3,946,328	47,813	—	—	—	—	—	—
Issuance of Series D and D-1 convertible preferred stock, net of issuance costs of \$168	3,611,111	64,832	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	28,687	—	5	—	—	5
Issuance of common stock	—	—	6,563	—	5	—	—	5
Issuance of common stock warrant	—	—	—	—	317	—	—	317
Stock-based compensation expense	—	—	—	—	2,068	—	—	2,068
Accretion of convertible preferred stock to redemption value	—	1,291	—	—	(1,291)	—	—	(1,291)
Net loss	—	—	—	—	—	(16,709)	—	(16,709)
Balance at December 31, 2014	22,866,987	136,077	6,890,250	7	1,104	(27,832)	—	(26,721)
Series D convertible preferred stock issuance costs	—	(24)	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	191,720	—	89	—	—	89
Stock-based compensation expense	—	—	—	—	1,327	—	—	1,327
Unrealized gain on investments	—	—	—	—	—	—	31	31
Net loss	—	—	—	—	—	(7,971)	—	(7,971)
Balance at March 31, 2015 (unaudited)	<u>22,866,987</u>	<u>\$ 136,053</u>	<u>7,081,970</u>	<u>\$ 7</u>	<u>\$ 2,520</u>	<u>\$ (35,803)</u>	<u>\$ 31</u>	<u>\$ (33,245)</u>

The accompanying notes are an integral part of these consolidated financial statements.

SERES THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,			Three Months Ended March 31,	
	2012	2013	2014	2014	2015
	(unaudited)				
Cash flows from operating activities:					
Net loss	\$(3,126)	\$(6,102)	\$ (16,709)	\$(1,689)	\$ (7,971)
Adjustments to reconcile net loss to net cash used in operating activities:					
Stock-based compensation expense	28	209	2,068	45	1,327
Depreciation and amortization expense	25	88	190	30	92
(Gain) loss from revaluation of preferred stock warrant liability	—	8	1,418	(20)	(213)
Licensing fees paid in common stock warrant	—	—	317	—	—
Non-cash interest expense	—	19	81	16	30
Changes in operating assets and liabilities:					
Prepaid expenses and other current assets	(29)	(21)	(7)	30	(710)
Accounts payable	103	281	810	99	(189)
Accrued expenses and other current liabilities	74	197	1,474	66	(706)
Net cash used in operating activities	<u>(2,925)</u>	<u>(5,321)</u>	<u>(10,358)</u>	<u>(1,423)</u>	<u>(8,340)</u>
Cash flows from investing activities:					
Purchases of property and equipment	(292)	(174)	(1,001)	(80)	(214)
Purchases of investments	—	—	—	—	(59,255)
Changes in restricted cash	(27)	(10)	(102)	—	—
Net cash used in investing activities	<u>(319)</u>	<u>(184)</u>	<u>(1,103)</u>	<u>(80)</u>	<u>(59,469)</u>
Cash flows from financing activities:					
Proceeds from issuance of convertible preferred stock, net of issuance costs	8,930	—	123,203	—	(24)
Proceeds from issuance of promissory notes	500	—	—	—	—
Proceeds from issuance of notes payable and preferred stock warrant, net of issuance costs	—	944	2,000	500	—
Proceeds from exercise of stock options	—	—	5	—	89
Proceeds from issuance of common stock and restricted common stock	5	—	5	—	—
Repayment of notes payable	—	—	(400)	—	(300)
Payments of initial public offering costs	—	—	(821)	—	(1,096)
Net cash provided by (used in) financing activities	<u>9,435</u>	<u>944</u>	<u>123,992</u>	<u>500</u>	<u>(1,331)</u>
Net increase (decrease) in cash and cash equivalents	6,191	(4,561)	112,531	(1,003)	(69,140)
Cash and cash equivalents at beginning of period	24	6,215	1,654	1,654	114,185
Cash and cash equivalents at end of period	<u>\$ 6,215</u>	<u>\$ 1,654</u>	<u>\$ 114,185</u>	<u>\$ 651</u>	<u>\$ 45,045</u>
Supplemental disclosure of cash flow information:					
Cash paid for interest	\$ —	\$ 20	\$ 122	\$ —	\$ 40
Supplemental disclosure of non-cash investing and financing activities:					
Conversion of promissory notes and accrued interest into shares of convertible preferred stock	\$ 1,502	\$ —	\$ —	\$ —	\$ —
Accretion of convertible preferred stock to redemption value	\$ 276	\$ 875	\$ 1,291	\$ 233	\$ —
Issuance of preferred stock warrant in connection with notes payable	\$ —	\$ 156	\$ —	\$ —	\$ —
Deferred offering costs included in accounts payable and accrued expenses	\$ —	\$ —	\$ 863	\$ —	\$ 162
Property and equipment purchases included in accounts payable	\$ —	\$ —	\$ 101	\$ —	\$ 28

The accompanying notes are an integral part of these consolidated financial statements.

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1. Nature of the Business and Basis of Presentation

Seres Therapeutics, Inc. (the "Company") was incorporated under the laws of the State of Delaware in October 2010 under the name Newco LS21, Inc. In October 2011, the company changed its name to Seres Health, Inc., and in May 2015, the company changed its name to Seres Therapeutics, Inc. The Company is a microbiome therapeutics platform company developing a novel class of biological drugs, which are designed to restore health by repairing the function of a dysbiotic microbiome. The Company's lead product candidate, SER-109, is designed to prevent further recurrences of *Clostridium difficile* infection ("CDI"), a debilitating infection of the colon, and, if approved by the FDA, could be a first-in-field drug. Using its microbiome therapeutics platform, the Company is developing additional product candidates, including SER-262 to prevent an initial recurrence of primary CDI and other product candidates to treat inflammatory bowel disease, including ulcerative colitis, and enteric pathogens, such as antibiotic-resistant bacteria. The Company is also conducting research on metabolic diseases, such as early-stage, non-insulin dependent diabetes; other inflammatory diseases, such as Crohn's disease; and infections related to antibiotic use, cancer chemotherapy and immune suppression.

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, new technological innovations, protection of proprietary technology, dependence on key personnel, compliance with government regulations and the need to obtain additional financing. Product candidates currently under development will require significant additional research and development efforts, including extensive pre-clinical and clinical testing and regulatory approval, prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance-reporting capabilities.

The Company's product candidates are in development. There can be no assurance that the Company's research and development will be successfully completed, that adequate protection for the Company's intellectual property will be obtained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees and consultants.

The Company's consolidated financial statements have been prepared on the basis of continuity of operations, realization of assets and the satisfaction of liabilities in the ordinary course of business. The Company has experienced negative cash flows and had an accumulated deficit of \$27,832 and \$35,803 as of December 31, 2014 and March 31, 2015, respectively. The Company expects that its cash and cash equivalents at December 31, 2014 of \$114,185 will enable it to fund its operating expense and capital expenditure requirements through at least December 31, 2015. The Company expects that its cash, cash equivalents and investments of \$104,316 at March 31, 2015 will enable it to fund its operating expenses and capital expenditure requirements through at least March 31, 2016. The future viability of the Company is dependent on its ability to generate cash from operating activities or to raise additional capital to finance its operations. The Company's failure to raise capital as and when needed could have a negative impact on its financial condition and ability to pursue its business strategies.

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The Company is seeking to complete an initial public offering of its common stock. Upon the closing of a qualified public offering, the Company's outstanding convertible preferred stock will automatically convert into shares of common stock (see Note 9).

In the event the Company does not complete an initial public offering, the Company expects to seek additional funding through private financings, debt financing, collaboration agreements or government grants. The Company may not be able to obtain financing on acceptable terms, or at all, and the Company may not be able to enter into collaboration arrangements or obtain government grants. The terms of any financing may adversely affect the holdings or the rights of the Company's stockholders. If the Company is unable to obtain funding, the Company could be forced to delay, reduce or eliminate its research and development programs, product portfolio expansion or commercialization efforts, which could adversely affect its business prospects. Although management continues to pursue these plans, there is no assurance that the Company will be successful in obtaining sufficient funding on terms acceptable to the Company to fund continuing operations, if at all.

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of the Company and its wholly owned subsidiary after elimination of all intercompany accounts and transactions.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, the accrual of research and development expenses and the valuation of common stock, stock-based awards and the preferred stock warrant liability. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Actual results could differ from the Company's estimates.

Unaudited Interim Financial Information

The accompanying balance sheet as of March 31, 2015, the statements of operations and comprehensive loss and of cash flows for the three months ended March 31, 2014 and 2015, and the statement of convertible preferred stock and stockholders' deficit for the three months ended March 31, 2015 are unaudited. The unaudited interim financial statements have been prepared on the same basis as the audited annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of March 31, 2015 and the results of its operations and its cash flows for the three months ended March 31, 2014 and 2015. The financial data and other information disclosed in these notes related to the three months ended March 31, 2014 and 2015 are unaudited. The results for the three months ended March 31, 2015 are not necessarily indicative of results to be expected for the year ending December 31, 2015, any other interim periods, or any future year or period.

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Unaudited Pro Forma Information

The accompanying unaudited pro forma consolidated balance sheet as of March 31, 2015 has been prepared to give effect to the automatic conversion of all outstanding shares of convertible preferred stock into 22,866,987 shares of common stock and the warrant to purchase Series A-2 convertible preferred stock outstanding as of March 31, 2015 becoming a warrant to purchase 92,127 shares of common stock (see Note 8) as if the proposed initial public offering had occurred on March 31, 2015.

In the accompanying consolidated statements of operations, unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2014 and the three months ended March 31, 2015 have been prepared to give effect to the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock and the outstanding warrant to purchase Series A-2 convertible preferred stock becoming a warrant to purchase shares of common stock (see Note 8) as if the proposed initial public offering had occurred on the later of January 1, 2014 or the issuance date of the convertible preferred stock.

Cash Equivalents

The Company considers all short-term, highly liquid investments with original maturities of 90 days or less at acquisition date to be cash equivalents. Cash equivalents, which consist of money market accounts, corporate bonds and commercial paper purchased with original maturities of less than 90 days from the date of purchase, are stated at fair value.

Restricted Cash

The Company held cash of \$37 as of December 31, 2013 and \$139 as of December 31, 2014 and March 31, 2015 in a separate restricted bank account as a security deposit for the lease of the Company's facilities and as collateral for the Company's credit card program with Comerica Bank. The Company has classified these deposits as long-term restricted cash on its balance sheet.

Investments

The Company classifies its available-for-sale investments as current assets on the consolidated balance sheet if they mature within one year from the balance sheet date.

The Company classifies all of its investments as available-for-sale securities. The Company's investments are measured and reported at fair value using quoted prices in active markets for similar securities. Unrealized gains and losses on available-for-sale securities are reported as a separate component of stockholders' equity (deficit). The cost of securities sold is determined on a specific identification basis, and realized gains and losses are included in other income (expense) within the consolidated statement of operations and comprehensive loss. If any adjustment to fair value reflects a decline in the value of the investment that the Company considers to be "other than temporary", the Company reduces the investment to fair value through a charge to the consolidated statement of operations and comprehensive loss. No such adjustments were necessary during the periods presented.

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Concentration of Credit Risk and of Significant Suppliers

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents. The Company has all cash and cash equivalents balances at one accredited financial institution, in amounts that exceed federally insured limits. The Company does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

The Company is dependent on third-party manufacturers to supply products for research and development activities of its programs, including pre-clinical and clinical testing. These programs could be adversely affected by a significant interruption in the supply of such drug substance products.

Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The Company's cash equivalents, investments and preferred stock warrant liability are carried at fair value, determined according to the fair value hierarchy described above (see Note 3). The carrying values of the Company's accounts payable and accrued expenses approximate their fair value due to the short-term nature of these liabilities. The carrying value of the Company's outstanding debt as of December 31, 2014 and March 31, 2015 approximates fair value based on the variable interest rate for the borrowings outstanding as well as short duration of the term of the note (see Note 7). The fair value of the outstanding debt was estimated using a discounted cash flow analysis based on current market interest rates for debt issuances with similar remaining years to maturity, adjusted for credit risk, which represents a Level 3 measurement.

Deferred Offering Costs

The Company capitalizes certain legal, accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs (non-current) until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders' equity (deficit) as a reduction of additional paid-in capital generated as a result of the

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offering. As of December 31, 2014 and March 31, 2015, the Company had recorded \$1,684 and \$2,079, respectively, of deferred offering costs in contemplation of a probable 2015 equity financing. Should the equity financing no longer be considered probable of being consummated, all deferred offering costs will be charged to operating expenses in the consolidated statement of operations. The Company did not record any deferred offering costs as of December 31, 2013.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation expense is recognized using the straight-line method over the useful life of the asset. Laboratory equipment is depreciated over five years. Computer equipment and furniture and office equipment are depreciated over three years. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the related asset. Expenditures for repairs and maintenance of assets are charged to expense as incurred. Upon retirement or sale, the cost and related accumulated depreciation of assets disposed of are removed from the accounts and any resulting gain or loss is included in loss from operations.

Impairment of Long-Lived Assets

Long-lived assets consist of property and equipment. Long-lived assets to be held and used are tested for recoverability whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a long-lived asset for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset to its carrying value. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of an asset are less than its carrying amount. The impairment loss would be based on the excess of the carrying value of the impaired asset over its fair value, determined based on discounted cash flows. To date, the Company has not recorded any impairment losses on long-lived assets.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development expenses include salaries, stock-based compensation and benefits of employees, third-party license fees and other operational costs related to the Company's research and development activities, including allocated facility-related expenses and external costs of outside vendors engaged to conduct both pre-clinical studies and clinical trials.

Research Contract Costs and Accruals

The Company has entered into various research and development contracts with research institutions and other companies. These agreements are generally cancelable, and related payments are recorded as research and development expenses as incurred. The Company records accruals for

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estimated ongoing research costs. When evaluating the adequacy of the accrued liabilities, the Company analyzes progress of the studies, including the phase or completion of events, invoices received and contracted costs. Significant judgments and estimates are made in determining the accrued balances at the end of any reporting period. Actual results could differ from the Company's estimates. The Company's historical accrual estimates have not been materially different from the actual costs.

Patent Costs

All patent-related costs incurred in connection with filing and prosecuting patent applications are expensed as incurred due to the uncertainty about the recovery of the expenditure. Amounts incurred are classified as general and administrative expenses.

Accounting for Stock-Based Compensation

The Company measures all stock options and other stock-based awards granted to employees and directors based on the fair value on the date of the grant and recognizes compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Generally, the Company issues stock options and restricted stock awards with only service-based vesting conditions and records the expense for these awards using the straight-line method.

The Company measures stock-based awards granted to consultants and non-employees based on the fair value of the award on the date on which the related service is complete. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of the Company's common stock and updated assumption inputs in the Black-Scholes option-pricing model.

The Company classifies stock-based compensation expense in its consolidated statement of operations and comprehensive loss in the same manner in which the award recipient's payroll costs are classified or in which the award recipients' service payments are classified.

The Company recognizes compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from the Company's estimate, the Company may be required to record adjustments to stock-based compensation expense in future periods.

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company historically has been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own

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traded stock price. The expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The expected term of stock options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements or in the Company's tax returns. Deferred taxes are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of the deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Warrant to Purchase Convertible Preferred Stock

The Company classifies a warrant to purchase shares of its Series A-2 convertible preferred stock as a liability on its consolidated balance sheets as this warrant is a free-standing financial instrument that may require the Company to transfer assets upon exercise. The warrant was initially recorded at fair value on date of grant, and it is subsequently remeasured to fair value at each balance sheet date. Changes in fair value of the warrant are recognized as a component of other income (expense), net in the consolidated statement of operations and comprehensive loss. The Company will continue to adjust the liability for changes in fair value until the earlier of the exercise or expiration of the warrant or the warrant becoming a warrant to purchase common stock instead of preferred stock.

The Company uses the Black-Scholes option-pricing model, which incorporates assumptions and estimates, to value the preferred stock warrant. The Company has assessed these assumptions and

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estimates on a quarterly basis as additional information impacting the assumptions is obtained. Estimates and assumptions impacting the fair value measurement include the fair value per share of the underlying Series A-2 convertible preferred stock, the remaining contractual term of the warrant, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. The Company determines the fair value per share of the underlying preferred stock by taking into consideration the most recent sales of its convertible preferred stock, results obtained from third-party valuations and additional factors that are deemed relevant. The Company historically has been a private company and lacks company-specific historical and implied volatility information of its stock. Therefore, it estimates its expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrant. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrant. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

Segment Data

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is on developing Ecobiotic microbiome therapeutics to treat dysbiosis in the colonic microbiome. No revenue has been generated since inception, and all tangible assets are held in the United States.

Comprehensive Loss

Comprehensive loss includes net loss as well as other changes in stockholders' equity (deficit) that result from transactions and economic events other than those with stockholders. There was no difference between net loss and comprehensive loss for each of the years ended December 31, 2012, 2013 and 2014 and the three months ended March 31, 2014. For the three months ended March 31, 2015, other comprehensive income (loss) consisted of changes in unrealized gains (losses) from available-for-sale investments.

Net Loss per Share

Basic net loss per share is computed using the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed using the sum of the weighted average number of common shares outstanding during the period and, if dilutive, the weighted average number of potential shares of common stock, including the assumed exercise of stock options and warrants and unvested restricted stock. The Company applies the two-class method to calculate its basic and diluted net loss per share attributable to common stockholders, as its convertible preferred stock and common stock are participating securities. The two-class method is an earnings allocation formula that treats a participating security as having rights to earnings that otherwise would have been available to common stockholders. However, the two-class method does not impact the net loss per share of common stock as the Company was in a net loss position for each of the periods presented and preferred stockholders do not participate in losses.

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The Company's convertible preferred stock contractually entitles the holders of such shares to participate in dividends but does not contractually require the holders of such shares to participate in losses of the Company. Similarly, restricted stock awards granted by the Company entitle the holder of such awards to dividends declared or paid by the board of directors, regardless of whether such awards are unvested, as if such shares were outstanding common shares at the time of the dividend. However, the unvested restricted stock awards are not entitled to share in the residual net assets (deficit) of the Company. Accordingly, in periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

Recently Issued and Adopted Accounting Pronouncements

In June 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-10, *Development Stage Entities*. The amendments in this update removed all incremental financial reporting requirements, including inception-to-date information and certain other disclosures currently required under GAAP, in the financial statements of development stage companies. The amendments are effective for annual reporting periods beginning after December 15, 2014 and interim reporting periods beginning after December 15, 2015. Early adoption is permitted. The Company elected to early adopt this guidance and, therefore, has not presented inception-to-date disclosures in its consolidated financial statements.

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*. The amendments in this update will explicitly require a company's management to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. The new standard will be effective in the first annual period ending after December 15, 2016. Early application is permitted. The Company is currently evaluating the potential impact of the adoption of this standard, but believes its adoption will have no impact on its financial position, results of operations or cash flows.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation: Amendments to the Consolidation Analysis (Topic 810)* ("ASU 2015-02"), which modifies existing consolidation guidance for reporting organizations that are required to evaluate whether they should consolidate certain legal entities. ASU 2015-02 will be effective for annual periods beginning after December 15, 2015, and for interim periods within those fiscal years, and requires either a retrospective or a modified retrospective approach to adoption. Early adoption is permitted. The Company is currently evaluating the impact of the adoption of ASU 2015-02, but believes its adoption will have no material impact on its financial position, results of operations or cash flows.

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3. Fair Value of Financial Assets and Liabilities

The following tables present information about the Company's assets and liabilities as of December 31, 2013 and 2014 and March 31, 2015 that are measured at fair value on a recurring basis and indicate the level of the fair value hierarchy utilized to determine such fair values:

	Fair Value Measurements as of December 31, 2013 Using:			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	\$ —	\$ 1,301	\$ —	\$ 1,301
	<u>\$ —</u>	<u>\$ 1,301</u>	<u>\$ —</u>	<u>\$ 1,301</u>
Liabilities:				
Liability for preferred stock warrant	\$ —	\$ —	\$ 164	\$ 164
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 164</u>	<u>\$ 164</u>

	Fair Value Measurements as of December 31, 2014 Using:			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Liability for preferred stock warrant	\$ —	\$ —	\$ 1,582	\$ 1,582
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,582</u>	<u>\$ 1,582</u>

	Fair Value Measurements as of March 31, 2015 Using:			
	Level 1	Level 2	Level 3	Total
	(unaudited)			
Assets:				
Cash equivalents	\$ —	\$ 29,078	\$ —	\$29,078
Investments	—	59,271	—	59,271
	<u>\$ —</u>	<u>\$ 88,349</u>	<u>\$ —</u>	<u>\$88,349</u>
Liabilities:				
Liability for preferred stock warrant	\$ —	\$ —	\$ 1,369	\$ 1,369
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,369</u>	<u>\$ 1,369</u>

As of December 31, 2013 and March 31, 2015, the Company's cash equivalents, which were invested in money market funds, corporate bonds and commercial paper with original maturities of less than 90 days from the date of purchase, were valued based on Level 2 inputs. The fair values of the Company's investments, which consisted of corporate bonds and commercial paper as of March 31, 2015, were determined using Level 2 inputs. During the years ended December 31, 2013 and 2014 and the three months ended March 31, 2014 and 2015, there were no transfers between Level 1, Level 2 and Level 3.

The warrant liability in the table above is comprised of the values of a warrant for the purchase of Series A-2 convertible preferred stock (see Note 8) and is based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy.

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4. Investments

As of March 31, 2015, the fair value of available-for-sale investments by type of security was as follows:

	March 31, 2015 (unaudited)			Fair Value
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	
Investments:				
Corporate bonds	\$ 25,785	\$ —	\$ (8)	\$25,777
Commercial paper	33,455	39	—	33,494
	<u>\$59,240</u>	<u>\$ 39</u>	<u>\$ (8)</u>	<u>\$59,271</u>

Investments with original maturities of less than 90 days are included in cash and cash equivalents on the consolidated balance sheets and are not included in the table above. The Company did not hold any investments as of December 31, 2013 and 2014.

As of March 31, 2015, the Company's corporate bonds and commercial paper had remaining maturities of less than 12 months.

5. Property and Equipment, Net

Property and equipment, net consisted of the following:

	December 31,		March 31,
	2013	2014	2015 (unaudited)
Laboratory equipment	\$ 402	\$1,260	\$ 1,271
Computer equipment	29	115	115
Furniture and office equipment	12	58	165
Leasehold improvements	22	114	114
Construction in progress	—	—	23
	465	1,547	1,688
Less: Accumulated depreciation and amortization	(113)	(283)	(375)
	<u>\$ 352</u>	<u>\$1,264</u>	<u>\$ 1,313</u>

Depreciation and amortization expense was \$25, \$88 and \$190 for the years ended December 31, 2012, 2013 and 2014, respectively, and \$30 and \$92 for the three months ended March 31, 2014 and 2015, respectively.

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6. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	December 31,		March 31,
	2013	2014	2015 (unaudited)
Development and manufacturing costs	\$181	\$ 598	\$ 317
Payroll and payroll-related costs	22	547	304
Professional fees	45	314	234
Facility and other	15	278	271
	<u>\$263</u>	<u>\$1,737</u>	<u>\$ 1,126</u>

7. Notes Payable

On September 9, 2013, the Company entered into a loan and security agreement with Comerica Bank, which provided for borrowings of up to \$3,000 through August 2014. On September 9, 2013, the Company received \$1,000 from borrowings under the agreement, and from March to August 2014, the Company received \$2,000 from additional borrowings under the agreement. Through December 31, 2014, the Company borrowed the full \$3,000 available under the loan and security agreement and had made \$400 of scheduled principal repayments. During the three months ended March 31, 2015, the Company made \$300 of scheduled principal repayments. Borrowings under the loan and security agreement are collateralized by substantially all of the Company's assets, except for its intellectual property.

In accordance with the terms of the loan and security agreement, the Company is obligated to make monthly, interest-only payments on any term loans funded under the agreement until August 1, 2014. Thereafter, the Company is obligated to pay 30 consecutive, equal monthly installments of principal and interest from September 1, 2014 through February 1, 2017, the maturity date. Term loans under the loan and security agreement bear interest at an annual rate equal to 3.0% plus the greater of (1) the bank's prime rate and (2) the LIBOR rate plus 2.5% (the greater of which equated to 6.25% at December 31, 2014). In addition, a final payment of \$60 is due upon the earlier of the maturity date, acceleration of the term loans or prepayment of all or part of the term loans. That amount is being recorded as additional interest expense over the term of the loan and security agreement, using the effective interest method.

In connection with entering into the loan and security agreement, the Company granted to the lender a warrant to purchase 92,127 shares of Series A-2 convertible preferred stock at an exercise price of \$1.78 per share (see Note 8). The Company recorded the grant date fair value of the warrant of \$156 as a debt discount and as a preferred stock warrant liability on the grant date. The debt discount, which also reflected \$26 of fees paid to the lender, is being accreted to the carrying value of the debt, using the effective interest method.

Accretion of the debt discount recorded as additional interest expense was \$19 and \$66 for the years ended December 31, 2013 and 2014, respectively, and \$0 and \$12 for the three months ended March 31, 2014 and 2015, respectively. As of December 31, 2013 and 2014 and March 31, 2015, the unamortized debt discount was \$162, \$96 and \$84, respectively.

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There are no financial covenants associated with the loan and security agreement; however, there are negative covenants restricting the Company's activities, including limitations on dispositions, mergers or acquisitions, encumbering or granting a security interest in its intellectual property, incurring indebtedness or liens, paying dividends, making certain investments and engaging in certain other business transactions. The obligations under the loan and security agreement are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in the Company's business, operations or financial or other condition.

As of December 31, 2014, annual principal repayment requirements under the loan and security agreement were \$1,200 during each of the years ending December 31, 2015 and 2016, and \$200 during the year ending December 31, 2017.

8. Preferred Stock Warrant Liability

In September 2013, the Company issued a warrant to purchase 92,127 shares of Series A-2 convertible preferred stock in connection with a loan and security agreement (see Note 7). The warrant was immediately exercisable at an exercise price of \$1.78 per share and has a contractual term of ten years from issuance. The fair value of the warrant at issuance was estimated to be \$156 and was recorded as a debt discount and as a preferred stock warrant liability.

The Company remeasures the fair value of the liability for this preferred stock warrant at each reporting date from its grant date, with any adjustments being recorded as a component of other income (expense), net in the Company's consolidated statement of operations and comprehensive loss. The Company recorded losses of \$8 and \$1,418 for the years ended December 31, 2013 and 2014, respectively, and gains of \$20 and \$213 for the three months ended March 31, 2014 and 2015, respectively, to reflect the change in fair value of this preferred stock warrant.

The following assumptions and inputs were used in determining the fair value of the preferred stock warrant liability valued using the Black-Scholes option-pricing model:

	<u>Year Ended December 31,</u>		<u>Three Months</u>	
	<u>2013</u>	<u>2014</u>	<u>2014</u>	<u>2015</u>
			(unaudited)	
Risk-free interest rate	3.20%	2.17%	2.82%	1.83%
Expected term (in years)	9.7	8.7	9.5	8.5
Expected volatility	86.0%	84.0%	86.0%	80.0%
Expected dividend yield	0%	0%	0%	0%
Fair value of Series A-2 convertible preferred stock	\$ 2.07	\$ 17.18	\$ 1.56	\$ 14.87

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The following table provides a rollforward of the fair value of the Company's preferred stock warrant liability:

	<u>Fair Value</u>
Balance as of December 31, 2012	\$ —
Issuance of Series A-2 preferred stock warrant	156
Loss on revaluation	8
Balance as of December 31, 2013	164
Loss on revaluation	1,418
Balance as of December 31, 2014	1,582
Gain on revaluation	(213)
Balance as of March 31, 2015 (unaudited)	<u>\$ 1,369</u>

Upon the closing of an initial public offering in which the Series A-2 convertible preferred stock is converted into common stock, the preferred stock warrant will become exercisable for common stock instead of preferred stock, and the preferred stock warrant liability, remeasured at fair value at that time, will be reclassified to additional paid-in capital.

9. Convertible Preferred Stock

The Company has issued Series A, Series A-2, Series B, Series C, Series D and Series D-1 convertible preferred stock (collectively, the "Convertible Preferred Stock"). The Convertible Preferred Stock is classified outside of stockholders' equity (deficit) because the shares contain redemption features that are not solely within the control of the Company. As of December 31, 2014 and March 31, 2015, the Company's certificate of incorporation, as amended and restated, authorized the Company to issue 24,348,003 shares of \$0.001 par value preferred stock.

In June 2012, the Company issued 3,797,468 shares of Series A convertible preferred stock at an issuance price of \$0.79 per share for proceeds of \$3,000, net of issuance costs of \$70. At that same time, convertible promissory notes in the amount of \$1,400 and accrued interest of \$102 were converted into 1,901,883 shares of Series A convertible preferred stock.

In October 2012, the Company issued 2,531,646 shares of Series A convertible preferred stock at an issuance price of \$0.79 per share for proceeds of \$2,000.

In November 2012, the Company issued 2,247,192 shares of Series A-2 convertible preferred stock at an issuance price of \$1.78 per share for proceeds of \$4,000.

In May 2014, the Company issued 4,831,359 shares of Series B convertible preferred stock at an issuance price of \$2.20 per share for proceeds of \$10,558, net of issuance costs of \$71.

In November 2014, the Company issued 3,946,328 shares of Series C convertible preferred stock at an issuance price of \$12.1632 per share for proceeds of \$47,813, net of issuance costs of \$187.

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In December 2014, the Company issued 2,222,222 shares of Series D convertible preferred stock and 1,388,889 shares of Series D-1 convertible preferred stock at an issuance price of \$18.00 per share for aggregate proceeds of \$64,832, net of issuance costs of \$168.

Convertible Preferred Stock consisted of the following:

	December 31, 2013				
	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A convertible preferred stock	8,230,997	8,230,997	\$ 7,231	\$ 7,301	8,230,997
Series A-2 convertible preferred stock	3,575,275	2,247,192	4,352	4,352	2,247,192
	<u>11,806,272</u>	<u>10,478,189</u>	<u>\$ 11,583</u>	<u>\$ 11,653</u>	<u>10,478,189</u>

	December 31, 2014				
	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A convertible preferred stock	8,230,997	8,230,997	\$ 7,767	\$ 7,861	8,230,997
Series A-2 convertible preferred stock	2,339,319	2,247,192	4,665	4,700	2,247,192
Series B convertible preferred stock	4,831,359	4,831,359	11,000	11,146	4,831,359
Series C convertible preferred stock	3,946,328	3,946,328	47,813	48,376	3,946,328
Series D convertible preferred stock	3,611,111	2,222,222	39,900	40,123	2,222,222
Series D-1 convertible preferred stock	1,388,889	1,388,889	24,932	25,077	—
	<u>24,348,003</u>	<u>22,866,987</u>	<u>\$ 136,077</u>	<u>\$ 137,283</u>	<u>21,478,098</u>

	March 31, 2015 (unaudited)				
	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Carrying Value	Liquidation Preference	Common Stock Issuable Upon Conversion
Series A convertible preferred stock	8,230,997	8,230,997	\$ 7,767	\$ 8,016	8,230,997
Series A-2 convertible preferred stock	2,339,319	2,247,192	4,665	4,793	2,247,192
Series B convertible preferred stock	4,831,359	4,831,359	11,000	11,366	4,831,359
Series C convertible preferred stock	3,946,328	3,946,328	47,813	49,331	3,946,328
Series D convertible preferred stock	3,611,111	3,611,111	64,808	66,486	3,611,111
Series D-1 convertible preferred stock	1,388,889	—	—	—	—
	<u>24,348,003</u>	<u>22,866,987</u>	<u>\$ 136,053</u>	<u>\$ 139,992</u>	<u>22,866,987</u>

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The holders of the Convertible Preferred Stock have the following rights and preferences:

Voting Rights

The holders of Convertible Preferred Stock are entitled to vote, together with the holders of common stock, on all matters submitted to stockholders for a vote and have the right to vote the number of shares equal to the number of shares of common stock into which such Convertible Preferred Stock could convert on the record date for determination of stockholders entitled to vote. In addition, holders of Series A, Series A-2, Series B and Series C convertible preferred stock, voting as separate class, are entitled to elect one director of the Company.

Dividends

The holders of Convertible Preferred Stock are entitled to receive dividends in preference to any dividend on common stock at the rate of 8% of the Original Issue Price (as defined below) per share, per annum compounded. Dividends are payable only when, as, and if declared by the board of directors. As of December 31, 2014 and March 31, 2015, no dividends had been declared or paid by the Company. The Original Issue Price is \$0.79 per share for Series A convertible preferred stock, \$1.78 per share for Series A-2 convertible preferred stock, \$2.20 per share for Series B convertible preferred stock, \$12.16 per share for Series C convertible preferred stock, \$18.00 per share for Series D convertible preferred stock and \$18.00 per share for Series D-1 convertible preferred stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Convertible Preferred Stock.

Liquidation Preference

In the event of any liquidation, voluntary or involuntary, dissolution or winding up of the Company or Deemed Liquidation Event (as defined below), holders of Convertible Preferred Stock are entitled to receive, in preference to all other stockholders, and to the extent available, an amount equal to the Original Issue Price per share, adjusted for any stock dividends, stock splits or reclassifications, plus any accruing dividends accrued but unpaid, whether or not declared, together with any other dividends declared but unpaid. In the event that proceeds are not sufficient to permit payment in full to these holders, the proceeds will be ratably distributed among the holders of Convertible Preferred Stock on a *pari passu* basis to the full preferential amount each such holder is otherwise entitled to receive.

After payments have been made in full to the holders of convertible preferred stock, then, to the extent available, holders of the common stock will receive the remaining amounts available for distribution ratably in proportion to the number of common shares held by them provided, however, if the holders of any series of Convertible Preferred Stock would receive a greater amount of the proceeds if they had converted their shares of Convertible Preferred Stock, then such holders shall not receive any proceeds under the preceding paragraph and will receive proceeds on an as converted to common stock basis.

Unless (i) the holders of at least 60% of the then outstanding shares of the Convertible Preferred Stock, voting together as a single class and (ii) the holders of the majority of the then outstanding shares of Series C convertible preferred stock, voting as a separate class, elect otherwise, a Deemed

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Liquidation Event shall include a merger or consolidation (other than one in which stockholders of the Company own a majority by voting power of the outstanding shares of the surviving or acquiring corporation) or a sale, lease, transfer, exclusive license or other disposition of all or substantially all of the assets of the Company.

Conversion

Each share of Series A, Series A-2, Series B, Series C and Series D convertible preferred stock is convertible into common stock at the option of the stockholder at any time after the date of issuance. Each share of Series A, Series A-2, Series B, Series C and Series D convertible preferred stock will automatically be converted into shares of common stock, at the applicable conversion ratio of each series then in effect, upon a qualified public offering, defined as any listing of the Company's common stock on the NYSE or NASDAQ.

Except with respect to Series D-1 convertible preferred stock, the conversion ratio of each series of Convertible Preferred Stock is determined by dividing the Original Issue Price of each series of preferred stock by the Conversion Price of each series. The Conversion Price is \$0.79 for Series A, \$1.78 for Series A-2, \$2.20 for Series B, \$12.16 for Series C and \$18.00 for Series D, each being subject to adjustment as set forth in the Company's certificate of incorporation, as amended and restated, unless the holders of at least 60% of the outstanding Series A, Series A-2, Series B, Series C and Series D convertible preferred stock agree that no such adjustment shall be made. As of December 31, 2014 and March 31, 2015, all outstanding shares of Series A, Series A-2, Series B, Series C and Series D convertible preferred stock were convertible into common stock on a 1-for-1 basis.

As of December 31, 2014, each share of Series D-1 convertible preferred stock was automatically convertible into Series D convertible preferred stock upon either (i) the expiration of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended ("HSR Act"), such that a holder of Series D-1 convertible preferred stock could acquire shares of Series D preferred stock, or (ii) if applicable, a transfer of shares of Series D-1 convertible preferred stock to a person that would not be required to make a filing under the HSR Act to acquire shares of Series D convertible preferred stock. On January 23, 2015, the waiting period under the HSR Act expired and all outstanding shares of Series D-1 convertible preferred stock automatically converted into 1,388,889 shares of Series D convertible preferred stock.

Redemption Rights

In conjunction with the closing of the Series C convertible preferred stock financing, the redemption rights of the Series A, Series A-2 and Series B convertible preferred stock were removed at that time. As a result of the removal of the redemption rights, as of November 24, 2014, the Company ceased the periodic recording of adjustments to accrete the carrying values of Series A, Series A-2 and Series B convertible preferred stock to their respective redemption values through January 1, 2019. Prior to November 24, 2014, the carrying values of the Series A, Series A-2 and Series B convertible preferred stock were being accreted to their redemption values through January 1, 2019.

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Reissuance

Shares of any series of Convertible Preferred Stock that are redeemed or converted will be retired or canceled and cannot be reissued by the Company.

10. Stockholders' Equity (Deficit)

Common Stock

As of December 31, 2014 and March 31, 2015, the Company's certificate of incorporation, as amended and restated, authorized the Company to issue 38,000,000 shares of \$0.001 par value common stock.

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are entitled to receive dividends, as may be declared by the board of directors, if any, subject to the preferential dividend rights of the Convertible Preferred Stock. When dividends are declared on shares of common stock, the Company must declare at the same time a dividend payable to the holders of Convertible Preferred Stock equivalent to the dividend amount they would receive if each preferred share were converted into common stock. The Company may not pay dividends to common stockholders until all dividends accrued or declared but unpaid on the Convertible Preferred Stock have been paid in full. No dividends had been declared to date.

As of December 31, 2014 and March 31, 2015, the Company had reserved 27,277,091 shares and 27,786,995 shares, respectively, for the conversion of the outstanding shares of Convertible Preferred Stock (see Note 9), the exercise of outstanding stock options and the number of shares remaining available for future grant under the Company's 2012 Plan, the exercise of outstanding common stock warrants, and the exercise of an outstanding warrant to purchase Series A-2 convertible preferred stock assuming it becomes a warrant to purchase common stock (see Note 8).

Common Stock Warrants

In June 2014, the Company entered into a research agreement under which it acquired a license to intellectual property. In exchange for the license, the Company issued to the research institution a warrant to purchase 454,545 shares of common stock at an exercise price of \$0.01 per share, which was immediately exercisable. Upon issuance of the warrant, the Company recorded research and development expense of \$317 for the fair value of the warrant, determined using the following assumptions in the Black-Scholes option-pricing model: expected volatility of 86.0%, risk-free interest rate of 2.3%, expected term of seven years (equaling the contractual term of the warrant) and no expected dividends. Because this warrant is indexed to the Company's stock and can only be settled by gross physical delivery of shares or net share settlement, the Company has determined that this warrant qualifies for equity classification. Unless earlier exercised or terminated, the warrant will be automatically exercised upon the closing of an initial public offering by the Company in a cashless exercise, with shares issued being determined based on the initial public offering price.

Also in connection with the research agreement, in June 2014, the Company issued a warrant to purchase up to 284,090 shares of common stock at an exercise price equal to the per share price at

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which the Company most recently sold shares of its preferred stock (which was \$18.00 as of December 31, 2014 and March 31, 2015), which is exercisable for a number of shares to be determined by the Company's board of directors from time to time, upon achieving specified milestones related to up to five indications. No portion of the warrant was exercisable as of March 31, 2015. Unless the milestones are achieved and the warrant is earlier exercised, this warrant will be terminated upon the closing of an initial public offering by the Company. Because achievement of the specified milestones was not deemed probable as of December 31, 2014, the Company did not record any expense for this warrant from date of issuance through March 31, 2015.

2012 Stock Incentive Plan

The Company's 2012 Stock Incentive Plan, as amended, (the "2012 Plan") provides for the Company to sell or issue common stock or restricted common stock, or to grant incentive stock options or nonqualified stock options for the purchase of common stock, to employees, members of the board of directors and consultants of the Company. The 2012 Plan is administered by the board of directors, or at the discretion of the board of directors, by a committee of the board. The exercise prices, vesting and other restrictions are determined at the discretion of the board of directors, or their committee if so delegated, except that the exercise price per share of stock options may not be less than 100% of the fair market value of the share of common stock on the date of grant and the term of stock option may not be greater than ten years. The Company generally grants stock-based awards with service conditions only ("service-based" awards).

Stock options granted under the 2012 Plan generally vest over four years and expire after ten years, although options have been granted with vesting terms less than four years.

The total number of shares of common stock that may be issued under the 2012 Plan was 1,261,836 shares as of December 31, 2013. In May 2014, the Company effected an increase in the number of shares of common stock reserved for issuance under the 2012 Plan to 3,561,836 shares. In December 2014, the Company effected an increase in the number of shares of common stock reserved for issuance under the 2012 Plan to 3,608,029 shares. The total number of shares of common stock that may be issued under the 2012 Plan was 3,608,029 shares as of December 31, 2014, none of which remained available for future grant at December 31, 2014. In March 2015, the Company effected an increase in the number of shares of common stock reserved for issuance under the 2012 Plan to 4,309,653 shares. As of March 31, 2015, there were 100,000 shares available for future grant under the 2012 Plan.

As required by the 2012 Plan, the exercise price for stock options granted is not to be less than the fair value of common shares as determined by the Company as of the date of grant. The Company values its common stock by taking into consideration its most recently available valuation of common shares performed by management and the board of directors as well as additional factors which may have changed since the date of the most recent contemporaneous valuation through the date of grant.

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Stock Option Valuation

The assumptions that the Company used to determine the fair value of the stock options granted to employees and directors were as follows, presented on a weighted average basis:

	Year Ended December 31,			Three Months Ended March 31, 2015 (unaudited)
	2012	2013	2014	
Risk-free interest rate	0.92%	1.27%	1.83%	1.57%
Expected term (in years)	6.0	6.0	6.0	6.0
Expected volatility	109.4%	85.9%	83.5%	76.0%
Expected dividend yield	0%	0%	0%	0%

The Company did not grant any stock options to employees and directors during the three months ended March 31, 2014.

Stock Options

The following table summarizes the Company's stock option activity since January 1, 2012:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding as of January 1, 2012	—	\$ —	—	\$ —
Granted	317,836	0.10		
Exercised	—	—		
Forfeited	—	—		
Outstanding as of December 31, 2012	317,836	\$ 0.10	9.65	\$ —
Granted	999,000	0.48		
Exercised	—	—		
Forfeited	(55,000)	0.10		
Outstanding as of December 31, 2013	1,261,836	\$ 0.40	9.34	\$ 100
Granted	2,361,943	1.88		
Exercised	(28,687)	0.16		
Forfeited	(15,750)	1.12		
Outstanding as of December 31, 2014	3,579,342	\$ 1.38	9.21	\$ 59,498
Granted	611,624	15.77		
Exercised	(191,720)	0.46		
Forfeited	(10,000)	0.10		
Outstanding as of March 31, 2015 (unaudited)	3,989,246	\$ 3.63	9.17	\$ 48,425
Options vested and expected to vest as of December 31, 2014	3,579,342	\$ 1.38	9.21	\$ 59,498
Options exercisable as of December 31, 2014	662,451	\$ 0.38	8.27	\$ 11,671
Options vested and expected to vest as of March 31, 2015 (unaudited)	3,989,246	\$ 3.63	9.17	\$ 48,425
Options exercisable as of March 31, 2015 (unaudited)	545,388	\$ 0.36	8.01	\$ 8,405

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The weighted average grant-date fair value of stock options granted during the years ended December 31, 2012, 2013 and 2014 and the three months ended March 31, 2015 was \$0.09, \$0.35, \$4.25 and \$10.50 per share, respectively. The total intrinsic value of stock options exercised during the year ended December 31, 2014 was \$512 and during the three months ended March 31, 2015 was \$2,941.

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock.

During the year ended December 31, 2014, the Company granted performance-based stock options to employees for the purchase an aggregate of 60,000 shares of common stock with a grant date fair value of \$3.92 per share. These stock options are exercisable only upon achievement of specified performance targets in each option agreement. As of December 31, 2014, none of these options were exercisable because none of the specified performance targets had been achieved. Because achievement of the specified performance targets was not deemed probable as of December 31, 2014, the Company did not record any expense for these stock options from date of issuance through December 31, 2014 and March 31, 2015.

As of December 31, 2013 and 2014 and March 31, 2015, there were outstanding unvested service-based stock options held by non-employees for the purchase of 135,961, 69,688 and 48,126 shares, respectively, of common stock.

Restricted Common Stock

The Company has granted restricted common stock with time-based vesting conditions. Unvested shares of restricted common stock may not be sold or transferred by the holder. These restrictions lapse according to the time-based vesting conditions of each award. The table below summarizes the Company's restricted stock activity since January 1, 2012:

	Number of Shares	Weighted Average Grant Date Fair Value
Unvested restricted common stock as of January 1, 2012	400,000	\$ 0.001
Issued	2,440,000	\$ 0.001
Vested	(981,250)	\$ 0.001
Forfeited and repurchased	(250,000)	\$ 0.001
Unvested restricted common stock as of December 31, 2012	1,608,750	\$ 0.001
Vested	(675,000)	\$ 0.001
Forfeited and repurchased	(735,000)	\$ 0.001
Unvested restricted common stock as of December 31, 2013	198,750	\$ 0.001
Vested	(146,250)	\$ 0.001
Unvested restricted common stock as of December 31, 2014	52,500	\$ 0.001
Vested	(25,625)	\$ 0.001
Unvested restricted common stock as of March 31, 2015 (unaudited)	<u>26,875</u>	\$ 0.001

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During the years ended December 31, 2012 and 2013, the Company reacquired, at their original issuance price, 250,000 shares and 735,000 shares, respectively, of restricted common stock that were forfeited by former employees.

The aggregate intrinsic value of restricted stock awards that vested during the years ended December 31, 2012, 2013 and 2014 and March 31, 2015 was \$33, \$185, \$684 and \$404, respectively.

Stock-based Compensation

The Company recorded stock-based compensation expense related to stock options and restricted common stock in the following expense categories of its consolidated statements of operations and comprehensive loss:

	Year Ended December 31,			Three Months Ended	
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2014</u>	<u>2015</u>
Research and development expenses	\$ 26	\$ 177	\$1,068	\$ 32	\$ 623
General and administrative expenses	2	32	1,000	13	704
	<u>\$ 28</u>	<u>\$ 209</u>	<u>\$2,068</u>	<u>\$ 45</u>	<u>\$ 1,327</u>

As of December 31, 2014, the Company had an aggregate of \$10,309 of unrecognized stock-based compensation cost, which is expected to be recognized over a weighted average period of 3.2 years. As of March 31, 2015, the Company had an aggregate of \$15,573 of unrecognized compensation cost, which is expected to be recognized over a weighted average period of 3.3 years.

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11. Net Loss per Share

Basic and diluted net loss per share attributable to common stockholders was calculated as follows:

	Year Ended December 31,			Three Months Ended March 31,	
	2012	2013	2014	(unaudited)	
	2014	2015			
Numerator:					
Net loss	\$ (3,126)	\$ (6,102)	\$ (16,709)	\$ (1,689)	\$ (7,971)
Accretion of convertible preferred stock to redemption value	(276)	(875)	(1,291)	(233)	—
Net loss attributable to common stockholders	<u>\$ (3,402)</u>	<u>\$ (6,977)</u>	<u>\$ (18,000)</u>	<u>\$ (1,922)</u>	<u>\$ (7,971)</u>
Denominator:					
Weighted average common shares outstanding, basic and diluted	<u>5,725,120</u>	<u>6,394,916</u>	<u>6,748,037</u>	<u>6,686,389</u>	<u>6,912,725</u>
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (0.59)</u>	<u>\$ (1.09)</u>	<u>\$ (2.67)</u>	<u>\$ (0.29)</u>	<u>\$ (1.15)</u>

The Company's potential dilutive securities, which include stock options, unvested restricted common stock, convertible preferred stock and warrants to purchase convertible preferred stock or common stock, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The following potential common shares, presented based on amounts outstanding at each period end, were excluded from the calculation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	Year Ended December 31,			Three Months Ended March 31,	
	2012	2013	2014	(unaudited)	
	2014	2015			
Stock options to purchase common stock	317,836	1,261,836	3,579,342	1,261,836	3,989,246
Unvested restricted common stock	1,608,750	198,750	52,500	129,375	26,875
Warrants for the purchase of convertible preferred stock	—	92,127	92,127	92,127	92,127
Warrants for the purchase of common stock	—	—	738,635	—	738,635
Convertible preferred stock (as converted to common stock)	<u>10,478,189</u>	<u>10,478,189</u>	<u>21,478,098</u>	<u>10,478,189</u>	<u>22,866,987</u>
	<u>12,404,775</u>	<u>12,030,902</u>	<u>25,940,702</u>	<u>11,961,527</u>	<u>27,713,870</u>

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12. Unaudited Pro Forma Net Loss per Share

The unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2014 and the three months ended March 31, 2015 gives effect to adjustments arising upon the closing of a qualified initial public offering. The unaudited pro forma net loss attributable to common stockholders used in the calculation of unaudited basic and diluted pro forma net loss per share attributable to common stockholders does not include the effects of the accretion of convertible preferred stock to redemption value or loss from revaluation of preferred stock warrant liability because the calculation assumes that the conversion of convertible preferred stock into common stock had occurred on the later of January 1, 2014 or the issuance date of the convertible preferred stock.

The unaudited pro forma basic and diluted weighted average common shares outstanding used in the calculation of unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2014 and the three months ended March 31, 2015 give effect to the automatic conversion upon a qualified initial public offering of all outstanding shares of convertible preferred stock as of December 31, 2014 and March 31, 2015 into 22,866,987 shares of common stock as if the conversion had occurred on the later of January 1, 2014 or the issuance date of the convertible preferred stock.

Unaudited pro forma basic and diluted net loss per share attributable to common stockholders was calculated as follows:

	Year Ended December 31, 2014	Three Months Ended March 31, 2015
	(unaudited)	
Numerator:		
Net loss attributable to common stockholders	\$ (18,000)	\$ (7,971)
Accretion of convertible preferred stock to redemption value	1,291	—
(Gain) loss from revaluation of preferred stock warrant liability	1,418	(213)
Pro forma net loss attributable to common stockholders	<u>\$ (15,291)</u>	<u>\$ (8,184)</u>
Denominator:		
Weighted average common shares outstanding, basic and diluted	6,748,037	6,912,725
Pro forma adjustment for assumed automatic conversion of all outstanding shares of convertible preferred stock upon the closing of the proposed initial public offering	13,935,474	22,866,987
Pro forma weighted average common shares outstanding, basic and diluted	<u>20,683,511</u>	<u>29,779,712</u>
Pro forma net loss per share attributable to common stockholders, basic and diluted	<u>\$ (0.74)</u>	<u>\$ (0.27)</u>

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13. Commitments and Contingencies**Leases**

The Company leases office and laboratory space under an operating lease agreement. The lease expires in January 2018 with no extension periods. The Company does have a right of expansion over the term as additional space becomes available but not an obligation. During the years ended December 31, 2012, 2013 and 2014 and the three months ended March 31, 2014 and 2015, the Company recognized \$99, \$152, \$543, \$42 and \$186, respectively, of rental expense related to office and laboratory space.

Future minimum lease payments for this operating lease as of December 31, 2014 were as follows:

<u>Year Ending December 31,</u>	
2015	\$ 681
2016	695
2017	709
2018	60
Total	<u>\$2,145</u>

On February 13, 2015, the Company entered into a sublease for office space with a term expiring in February 2016. On April 1, 2015, the Company entered into a lease for additional office and laboratory space with a term expiring in April 2020. Minimum lease payments due under these new leases are \$594 during the year ending December 31, 2015, \$481 year ending December 31, 2016, \$427 during each of the years ending December 31, 2017, 2018 and 2019, and \$107 thereafter.

Indemnification Agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its board of directors that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company does not believe that the outcome of any claims under indemnification arrangements will have a material effect on its financial position, results of operations or cash flows, and it has not accrued any liabilities related to such obligations in its consolidated financial statements as of December 31, 2013 or 2014 or March 31, 2015.

14. Income Taxes

During the years ended December 31, 2012, 2013 and 2014 and the three months ended March 31, 2014 and 2015, the Company recorded no income tax benefits for the net operating losses incurred in each year or interim period, due to its uncertainty of realizing a benefit from those items.

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A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended December 31,		
	2012	2013	2014
Federal statutory income tax rate	(34.0)%	(34.0)%	(34.0)%
Research and development tax credits	(1.1)	(6.1)	(3.8)
State taxes, net of federal benefit	(5.3)	(5.3)	(5.3)
Stock-based compensation	0.5	1.2	2.3
Revaluation of preferred stock warrant liability	—	—	3.3
Nondeductible interest expense	1.2	—	—
Other	0.2	—	0.2
Change in deferred tax asset valuation allowance	38.5	44.2	37.3
Effective income tax rate	<u>—%</u>	<u>—%</u>	<u>—%</u>

Net deferred tax assets as of December 31, 2013 and 2014 consisted of the following:

	December 31,	
	2013	2014
Deferred tax assets:		
Net operating loss carryforwards	\$ 3,076	\$ 7,946
Research and development tax credit carryforwards	419	1,055
Capitalized organization costs	615	571
Stock-based compensation expense	16	436
Accrued expenses	46	447
Capitalized research and development expenses	147	136
Total deferred tax assets	<u>4,319</u>	<u>10,591</u>
Deferred tax liabilities:		
Depreciation and amortization	(25)	(69)
Total deferred tax liabilities	<u>(25)</u>	<u>(69)</u>
Valuation allowance	(4,294)	(10,522)
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

As of December 31, 2014, the Company had net operating loss carryforwards for federal and state income tax purposes of \$20,288 and \$19,852, respectively, which begin to expire in 2031 and 2031, respectively. As of December 31, 2014, the Company also had available research and development tax credit carryforwards for federal and state income tax purposes of \$796 and \$393, respectively, which begin to expire in 2031 and 2026, respectively. During the three months ended March 31, 2015, gross deferred tax assets increased by approximately \$3,160 due to the operating loss incurred by the Company during that period. Utilization of the net operating loss carryforwards and research and development tax credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of

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carryforwards that can be utilized annually to offset future taxable income. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50% over a three-year period. The Company has not conducted a study to assess whether a change of control has occurred or whether there have been multiple changes of control since inception due to the significant complexity and cost associated with such a study. If the Company has experienced a change of control, as defined by Section 382, at any time since inception, utilization of the net operating loss carryforwards or research and development tax credit carryforwards would be subject to an annual limitation under Section 382, which is determined by first multiplying the value of the Company's stock at the time of the ownership change by the applicable long-term tax-exempt rate, and then could be subject to additional adjustments, as required. Any limitation may result in expiration of a portion of the net operating loss carryforwards or research and development tax credit carryforwards before utilization. Further, until a study is completed and any limitation is known, no amounts are being presented as an uncertain tax position.

The Company has evaluated the positive and negative evidence bearing upon its ability to realize the deferred tax assets. Management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets as of December 31, 2013 and 2014 and March 31, 2015. Management reevaluates the positive and negative evidence at each reporting period.

Changes in the valuation allowance for deferred tax assets during the years ended December 31, 2012, 2013 and 2014 related primarily to the increases in net operating loss carryforwards and research and development tax credit carryforwards and were as follows:

	Year Ended December 31,		
	2012	2013	2014
Valuation allowance at beginning of year	\$ (394)	\$(1,599)	\$ (4,294)
Decreases recorded as benefit to income tax provision	—	—	—
Increases recorded to income tax provision	(1,205)	(2,695)	(6,228)
Valuation allowance as of end of year	<u>\$(1,599)</u>	<u>\$(4,294)</u>	<u>\$(10,522)</u>

15. Related Party Transactions

In October 2010, the Company entered into a services agreement with Flagship Ventures Management, Inc., an affiliate of one of its stockholders, Flagship Venture Funds, to provide general and administrative services to the Company, including the employer portions of employee health and dental benefit plans for Seres Therapeutics employees and consulting services. The Company made payments under the agreement of \$528, \$391 and \$454 during the years ended December 31, 2012, 2013 and 2014, respectively, and of \$146 and \$118 during the three months ended March 31, 2014 and 2015, respectively. There were no amounts due to Flagship Ventures Management, Inc. related to the services agreement as of December 31, 2013 and 2014. As of March 31, 2015, the amount due to Flagship Ventures Management, Inc. related to the services agreement was less than \$1.

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16. 401(k) Savings Plan

The Company has a defined contribution savings plan under Section 401(k) of the Internal Revenue Code. This plan covers substantially all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. Company contributions to the plan may be made at the discretion of the Company's board of directors. The Company has not made any contributions to date under the 401(k) Savings Plan.

17. Subsequent Events

For its consolidated financial statements as of December 31, 2014 and for the year then ended, the Company evaluated subsequent events through April 8, 2015, the date on which those financial statements were issued.

18. Subsequent Events (unaudited)

For its consolidated financial statements as of March 31, 2015, the Company evaluated subsequent events through May 13, 2015, the date on which those financial statements were issued.

Exercise of Common Stock Warrant

On April 29, 2015, a holder of a warrant to purchase 454,545 shares of the Company's common stock at an exercise price of \$0.01 per share exercised the warrant in full for a payment of \$5 (see Note 10).

Change of Company Name

On May 20, 2015, the Company changed its name from Seres Health, Inc. to Seres Therapeutics, Inc. through the filing of an amendment to its amended and restated certificate of incorporation.

Shares

Common Stock



Goldman, Sachs & Co.

BofA Merrill Lynch

Leerink Partners

Canaccord Genuity

Through and including _____, 2015 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

_____, 2015

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table indicates the expenses to be incurred in connection with the issuance and distribution of the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated, except the Securities and Exchange Commission registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and The NASDAQ Global Market listing fee.

	<u>Amount</u>
Securities and Exchange Commission registration fee	\$11,620
FINRA filing fee	15,500
Initial NASDAQ Global Market listing fee	125,000
Accountants' fees and expenses	*
Legal fees and expenses	*
Blue Sky fees and expenses	*
Transfer Agent's fees and expenses	*
Printing and engraving expenses	*
Miscellaneous	*
Total expenses	<u>\$</u> *

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our restated certificate of incorporation provides that none of our directors shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with any threatened, ending or completed action, suit or proceeding to which he or she was or is a party or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of

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Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Our restated certificate of incorporation provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our restated certificate of incorporation provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with each of our directors and officers. These indemnification agreements may require us, among other things, to indemnify our directors and officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of his or her service as one of our directors or officers, or any of our subsidiaries or any other company or enterprise to which the person provides services at our request.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act against certain liabilities.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding shares of capital stock issued by us within the past three years. Also included is the consideration received by us for such shares and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

(a) Issuance of Capital Stock.

- ÿ On June 1, 2012, the registrant issued 3,797,468 shares of Series A Preferred Stock for aggregate consideration of \$3.0 million to accredited investors and 1,901,833 shares of Series A Preferred Stock in converted promissory notes upon the cancellation of debt totaling \$1,400,000 in principal plus \$102,493 of accrued interest pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.
- ÿ On October 30, 2012, the registrant issued 2,531,646 shares of Series A Preferred Stock for aggregate consideration of \$2.0 million to accredited investors pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.
- ÿ On November 27, 2012, the registrant issued 2,247,192 shares of Series A-2 Preferred Stock for aggregate consideration of \$4.0 million to accredited investors pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.
- ÿ On May 23, 2014, the registrant issued 4,831,359 shares of Series B Preferred Stock for aggregate consideration of \$10.6 million to accredited investors pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.
- ÿ On November 24, 2014, the registrant issued 3,946,328 shares of Series C Preferred Stock for aggregate consideration of \$48.0 million to accredited investors pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.
- ÿ On December 19, 2014, the registrant issued 2,222,222 shares of Series D Preferred Stock and 1,388,889 shares of Series D-1 Preferred Stock, which converted into 1,388,889 shares of Series D preferred stock on January 23, 2015, for aggregate consideration of \$65.0 million to an accredited investor pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.
- ÿ On April 29, 2015, the registrant issued 454,545 shares of common stock upon the exercise of a warrant for common stock to an accredited investor pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.

(b) Stock Option Grants.

- ÿ From September 30, 2011 through May 27, 2015, the registrant granted stock options to purchase an aggregate of 4,315,403 shares of its common stock with exercise prices ranging from \$0.10 to \$15.77 per share, to certain employees, non-employees and directors in connection with services provided to the registrant by such parties.

(c) Warrants

- ÿ On September 9, 2013, the registrant issued a warrant to purchase 92,127 shares of Series A-2 Preferred Stock to an accredited investor pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.
- ÿ On June 6, 2014, the registrant issued a warrant to purchase 454,545 shares of common stock and a warrant to purchase up to 284,090 shares of common stock to an accredited investor pursuant to Section 4(a)(2) of the Securities Act and Rule 506 as a transaction not involving a public offering.

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Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
1.1*	Form of Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as amended (currently in effect)
3.2	Bylaws of the Registrant (currently in effect)
3.3	Form of Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of this offering)
3.4*	Form of Restated Bylaws of the Registrant (to be effective upon the closing of this offering)
4.1	Amended and Restated Investors' Rights Agreement, dated December 19, 2014, by and among the Registrant and each of the investors listed on Schedule A thereto
4.2*	Specimen Stock Certificate evidencing the shares of common stock
4.3	Warrant to Purchase Stock, dated September 9, 2013, issued by the Registrant to Comerica Bank
4.4	Common Stock Purchase Warrant, dated June 6, 2014, issued by the Registrant to Mayo Foundation for Medical Education and Research
5.1*	Opinion of Latham & Watkins LLP
10.1#	2012 Stock Incentive Plan, as amended, and forms of award agreements thereunder
10.2#	2015 Incentive Award Plan and forms of option agreements thereunder
10.3#	2015 Employee Stock Purchase Plan
10.4#	Non-Employee Director Compensation Program
10.5#	Form of Indemnification Agreement for Directors and Officers
10.6#*	Employment Agreement by and between the Registrant and Roger J. Pomerantz (to be effective upon the closing of this offering)
10.7#*	Employment Agreement by and between the Registrant and Eric D. Shaff (to be effective upon the closing of this offering)
10.8#*	Employment Agreement by and between the Registrant and David N. Cook (to be effective upon the closing of this offering)
10.9#*	Employment Agreement by and between the Registrant and John G. Aunins (to be effective upon the closing of this offering)
10.10#*	Employment Agreement by and between the Registrant and Michele Trucksis (to be effective upon the closing of this offering)
10.11	Loan and Security Agreement, dated September 9, 2013, by and between the Registrant and Comerica Bank, as amended.
10.12	Lease Agreement, dated June 29, 2012, by and between the Registrant and AREMA Region No. 21, LLC, as amended
10.13	Lease Agreement, dated April 1, 2015, by and between the Registrant and ARE-MA Region No. 38, LLC
10.14	Series D Preferred Stock Purchase Agreement, dated December 19, 2014, by and between the Registrant and Nestlé Health Science US Holdings, Inc.
21.1	Subsidiaries of Seres Therapeutics, Inc.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
23.2*	Consent of Latham & Watkins LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)

* To be filed by amendment.

Indicates management contract or compensatory plan.

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(b) Financial Statement Schedules. Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriter, at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) For the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (4) In a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

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- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on this 27th day of May, 2015.

SERES THERAPEUTICS, INC.

By: /s/ Roger J. Pomerantz
Roger J. Pomerantz, M.D.
President, Chief Executive Officer and Chairman of
the Board

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Seres Therapeutics, Inc., hereby severally constitute and appoint Roger J. Pomerantz, M.D. and Eric D. Shaff, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Roger J. Pomerantz</u> Roger J. Pomerantz, M.D.	President, Chief Executive Officer and Chairman of the Board (principal executive officer)	May 27, 2015
<u>/s/ Eric D. Shaff</u> Eric D. Shaff	Chief Financial Officer and Executive Vice President (principal financial and accounting officer)	May 27, 2015
<u>/s/ Noubar B. Afeyan</u> Noubar B. Afeyan, Ph.D.	Director	May 27, 2015
<u>/s/ Dennis A. Ausiello</u> Dennis A. Ausiello, M.D.	Director	May 27, 2015
<u>/s/ Grégory Behar</u> Grégory Behar	Director	May 27, 2015
<u>/s/ Werner Cautreels</u> Werner Cautreels, Ph.D.	Director	May 27, 2015
<u>/s/ Peter Barton Hutt</u> Peter Barton Hutt	Director	May 27, 2015
<u>/s/ Richard N. Kender</u> Richard N. Kender	Director	May 27, 2015
<u>/s/ Lorence H. Kim</u> Lorence H. Kim, M.D.	Director	May 27, 2015

Exhibit Index

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21.1	Subsidiaries of Seres Therapeutics, Inc.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
23.2*	Consent of Latham & Watkins LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)

* To be filed by amendment.

Indicates management contract or compensatory plan.

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
SERES HEALTH, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Seres Health, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**General Corporation Law**”),

DOES HEREBY CERTIFY:

That the name of this corporation is Seres Health, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on October 18, 2010 under the name Newco LS21, Inc.

That the Board of Directors of this corporation duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Seres Health, Inc. (the “**Corporation**”).

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle 19801. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 62,348,003 shares, consisting of (i) 38,000,000 shares of Common Stock, \$0.001 par value per share (“**Common Stock**”), and (ii) 24,348,003 shares of Preferred Stock, \$0.001 par value per share (“**Preferred Stock**”), of which 8,230,997 shares are hereby designated “**Series A Preferred Stock**,” 2,339,319 shares are hereby designated “**Series A-2 Preferred Stock**,” 4,831,359 shares are hereby designated “**Series B Preferred Stock**,” 3,946,328 shares are hereby designated “**Series C Preferred Stock**,” 3,611,111 shares are hereby designated “**Series D Preferred Stock**” and 1,388,889 shares are hereby designated “**Series D-1 Preferred Stock**.”

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

I. COMMON STOCK

A. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

B. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

II. PREFERRED STOCK

The Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series D-1 Preferred Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to “Sections” or “Subsections” in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

A. Dividends.

From and after the date of the issuance of any shares of Series A Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series A Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series A Preferred Stock (the “**Series A Accruing Dividends**”). From and after the date of the issuance of any shares of Series A-2 Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series A-2 Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series A-2 Preferred Stock (the “**Series A-2 Accruing Dividends**”). From and after the date of the issuance of any shares of Series B Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series B Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series B Preferred Stock (the “**Series B**

Accruing Dividends”). From and after the date of the issuance of any shares of Series C Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series C Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series C Preferred Stock (the “**Series C Accruing Dividends**”). From and after the date of the issuance of any shares of Series D Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series D Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series D Preferred Stock (the “**Series D Accruing Dividends**”). From and after the date of the issuance of any shares of Series D-1 Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series D-1 Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series D-1 Preferred Stock (the “**Series D-1 Accruing Dividends**” and, together with the Series A Accruing Dividends, the Series A-2 Accruing Dividends, the Series B Accruing Dividends, the Series C Accruing Dividends and the Series D Accruing Dividends, the “**Accruing Dividends**”). Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided however, that except as set forth in the following sentence of this Section 1 or in Subsection 2.1, such Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of the applicable series of Preferred Stock in an amount at least equal to the greater of (i) the amount of the aggregate Series A Accruing Dividends, Series A-2 Accruing Dividends, Series B Accruing Dividends, Series C Accruing Dividends, Series D Accruing Dividends or Series D-1 Accruing Dividends, as the case may be, then accrued on the shares of the applicable series of Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of the applicable series of Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of the applicable series of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of the applicable series of Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A Original Issue Price (as defined below), Series A-2 Original Issue Price (as defined below), Series B Original Issue Price (as defined below), Series C Original Issue Price (as defined below), Series D Original Issue Price (as defined below) or Series D-1 Original Issue Price (as defined below), as applicable; provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of

Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Preferred Stock dividend. The “**Series A Original Issue Price**” shall mean \$0.79 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The “**Series A-2 Original Issue Price**” shall mean \$1.78 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-2 Preferred Stock. The “**Series B Original Issue Price**” shall mean \$2.20 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock. The “**Series C Original Issue Price**” shall mean \$12.1632 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock. The “**Series D Original Issue Price**” shall mean \$18.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock. The “**Series D-1 Original Issue Price**” shall mean \$18.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D-1 Preferred Stock.

B. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

1. **Preferential Payments to Holders of Preferred Stock.** In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event (as defined below), the holders of shares of Preferred Stock then outstanding shall be entitled to be paid, on a pari passu basis, out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to (i) in the case of the Series A Preferred Stock, the greater of (A) the Series A Original Issue Price, plus any Series A Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (i) is hereinafter referred to as the “**Series A Liquidation Amount**”), (ii) in the case of the Series A-2 Preferred Stock, the greater of (A) the Series A-2 Original Issue Price, plus any Series A-2 Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (ii) is hereinafter referred to as the “**Series A-2 Liquidation Amount**”), (iii) in the case of the Series B Preferred Stock, the greater of (A) the Series B Original Issue Price, plus any Series B Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (iii) is hereinafter referred to as the “**Series B**

Liquidation Amount”), (iv) in the case of the Series C Preferred Stock, the greater of (A) the Series C Original Issue Price, plus any Series C Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (iv) is hereinafter referred to as the “**Series C Liquidation Amount**”), (v) in the case of the Series D Preferred Stock, the greater of (A) the Series D Original Issue Price, plus any Series D Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (v) is hereinafter referred to as the “**Series D Liquidation Amount**”) and (vi) in the case of the Series D-1 Preferred Stock, the greater of (A) the Series D-1 Original Issue Price, plus any Series D-1 Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (vi) is hereinafter referred to as the “**Series D-1 Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2. Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “**Deemed Liquidation Event**” unless (i) the holders of shares of Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of Preferred Stock, voting together as a separate class, and (ii) the holders of a majority of the then outstanding shares of Series C Preferred Stock, voting as a separate class, elect otherwise by written notice sent to the Corporation at least ten (10) days prior to the effective date of any such event:

(a) a merger or consolidation in which

(i) the Corporation is a constituent party or

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(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation (provided that, for the purpose of this Subsection 2.3.1, all shares of Common Stock issuable upon exercise of Options (as defined below) outstanding immediately prior to such merger or consolidation or upon conversion of Convertible Securities (as defined below) outstanding immediately prior to such merger or consolidation shall be deemed to be outstanding immediately prior to such merger or consolidation and, if applicable, converted or exchanged in such merger or consolidation on the same terms as the actual outstanding shares of Common Stock are converted or exchanged); or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within 90 days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (ii) if the holders of shares of Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of Preferred Stock so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in

good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders (the “**Available Proceeds**”), to the extent legally available therefor, on the 150th day after such Deemed Liquidation Event (the “**Redemption Date**”), to redeem all outstanding shares of Preferred Stock at a price per share equal to, in the case of the Series A Preferred Stock, the Series A Liquidation Amount, in the case of the Series A-2 Preferred Stock, the Series A-2 Liquidation Amount, in the case of the Series B Preferred Stock, the Series B Liquidation Amount, in the case of the Series C Preferred Stock, the Series C Liquidation Amount, in the case of the Series D Preferred Stock, the Series D Liquidation Amount, and, in the case of the Series D-1 Preferred Stock, the Series D-1 Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall redeem a pro rata portion of each holder’s shares of Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefor. The Corporation shall send written notice of the mandatory redemption (the “**Redemption Notice**”) to each holder of record of Preferred Stock not less than 40 days prior to the Redemption Date. The Redemption Notice shall state: (1) the number of shares of each series of Preferred Stock held by the holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice; (2) the Redemption Date, the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and the Series D-1 Liquidation Amount; (3) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Subsection 4.1); and (4) that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Preferred Stock to be redeemed. On or before the Redemption Date, each holder of shares of Preferred Stock to be redeemed on the Redemption Date, unless, if applicable, such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and/or the Series D-1 Liquidation Amount, as the case may be, for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Preferred Stock represented by a certificate are redeemed, a new certificate representing the unredeemed shares of Preferred Stock shall promptly be issued to such holder. If the Redemption Notice shall have been duly given, and if on the Redemption Date the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and/or the Series D-1 Liquidation Amount, as the case may be, payable upon redemption of the shares of Preferred Stock to be redeemed on the Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be

available therefor in a timely manner, then notwithstanding that the certificates evidencing any of the shares of Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Preferred Stock shall cease to accrue after the Redemption Date and all rights with respect to such shares shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and/or the Series D-1 Liquidation Amount, as the case may be, without interest upon surrender of their certificate or certificates therefor. Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director (as defined below).

2.3.4 Allocation of Escrow. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the “**Initial Consideration**”) shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction.

C. Voting.

1. General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class. Notwithstanding the foregoing, the holders of shares of Series D-1 Preferred Stock shall not be entitled to vote for the election of any director of the Corporation.

2. Election of Directors. The holders of record of the shares of Series A Preferred Stock, Series B Preferred Stock and/or Series C Preferred Stock (together, the “**ABC Preferred Stock**”), exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the “**Preferred Stock Director**”) and the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of ABC Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the ABC Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock (together, the “**Voting Preferred Stock**”) other than the Series D-1 Preferred Stock, exclusively and voting together as a single class (on an as-converted to Common Stock basis), shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

3. Preferred Stock Protective Provisions. At any time when shares of ABC Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of ABC Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

a. liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

b. amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation;

c. create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase or decrease the authorized number of shares of Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock or Series C Preferred Stock or increase the authorized number of shares of any additional class or series of capital stock unless the same ranks junior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

d. (i) reclassify, alter or amend any existing security of the Corporation that is pari passu with the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock in respect of any such right, preference or privilege;

e. purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof;

f. create, or authorize the creation of, or issue, or authorize the issuance of, any debt security or permit any subsidiary to take any such action with respect to any debt security unless such debt security has received the prior approval of the Board of Directors, including the approval of the Preferred Stock Director;

g. create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary; or

h. increase or decrease the authorized number of directors constituting the Board of Directors.

4. Series C Preferred Stock Protective Provisions. At any time when shares of Series C Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of Series C Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

a. amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or privileges of the Series C Preferred Stock;

b. purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof;

c. (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series C Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series C Preferred Stock in respect of any such right, preference or privilege; or

d. increase or decrease the authorized number of shares of Series C Preferred Stock.

5. Series D Preferred Stock Protective Provisions. At any time when shares of Series D Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in

addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of Series D Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

a. amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or privileges of the Series D Preferred Stock;

b. purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof and (iv) purchases or redemptions of Series D Preferred Stock or Series D-1 Preferred Stock by the Corporation pursuant to Section 6 of that certain Series D Stock Purchase Agreement, dated on or about December 19, 2014, by and between the Corporation and the investor named therein;

c. (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series D Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series D Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series D Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series D Preferred Stock in respect of any such right, preference or privilege; or

d. increase or decrease the authorized number of shares of Series D Preferred Stock.

6. Series D-1 Preferred Stock Protective Provisions. At any time when shares of Series D-1 Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of Series D-1 Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the

case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

a. amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or privileges of the Series D-1 Preferred Stock;

b. purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof and (iv) purchases or redemptions of Series D Preferred Stock or Series D-1 Preferred Stock by the Corporation pursuant to Section 6 of that certain Series D Stock Purchase Agreement, dated on or about December 19, 2014, by and between the Corporation and the investor named therein;

c. (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series D-1 Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series D-1 Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series D-1 Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series D-1 Preferred Stock in respect of any such right, preference or privilege; or

d. increase or decrease the authorized number of shares of Series D-1 Preferred Stock.

D. Optional Conversion.

The holders of the Voting Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

1. Right to Convert.

a. Conversion Ratios.

(1) Each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined below) in effect at the time of conversion. The “**Series A Conversion Price**” shall initially be equal to \$0.79. Such initial Series A Conversion Price, and the rate at which shares of Series A Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(2) Each share of Series A-2 Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series A-2 Original Issue Price by the Series A-2 Conversion Price (as defined below) in effect at the time of conversion. The “**Series A-2 Conversion Price**” shall initially be equal to \$1.78. Such initial Series A-2 Conversion Price, and the rate at which shares of Series A-2 Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(3) Each share of Series B Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below) in effect at the time of conversion. The “**Series B Conversion Price**” shall initially be equal to \$2.20. Such initial Series B Conversion Price, and the rate at which shares of Series B Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(4) Each share of Series C Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series C Original Issue Price by the Series C Conversion Price (as defined below) in effect at the time of conversion. The “**Series C Conversion Price**” shall initially be equal to \$12.1632. Such initial Series C Conversion Price, and the rate at which shares of Series C Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(5) Each share of Series D Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing \$12.1632 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock) by the Series D Conversion Price (as defined below) in effect at the time of conversion. The “**Series D Conversion Price**” shall initially be equal to \$12.1632. Such initial Series D Conversion Price, and the rate at which shares of Series D Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(6) Shares of Series D-1 Preferred Stock shall not be convertible at the option of the holder thereof.

b. Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

2. Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Voting Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Voting Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

3. Mechanics of Conversion.

a. Notice of Conversion. In order for a holder of Voting Preferred Stock to voluntarily convert shares of Voting Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Voting Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Voting Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of Voting Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Voting Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Voting Preferred Stock converted.

b. Reservation of Shares of Common Stock. The Corporation shall at all times when shares of Voting Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the

conversion of the Voting Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Voting Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Voting Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock or the Series D Preferred Stock, as the case may be, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Series A Conversion Price, Series A-2 Conversion Price, Series B Conversion Price, Series C Conversion Price or Series D Conversion Price.

c. Reservation of Shares of Series D Preferred Stock. The Corporation shall at all times when shares of Series D-1 Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series D-1 Preferred Stock, such number of its duly authorized shares of Series D Preferred Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Series D-1 Preferred Stock; and if at any time the number of authorized but unissued shares of Series D Preferred Stock shall not be sufficient to effect the conversion of all then outstanding shares of Series D-1 Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Series D Preferred Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation.

d. Effect of Conversion. All shares of Voting Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Voting Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Voting Preferred Stock and of such series of Voting Preferred Stock accordingly.

e. No Further Adjustment. Upon any such conversion, no adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price shall be made

for any declared but unpaid dividends on the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock or the Series D Preferred Stock, as the case may be, surrendered for conversion or on the Common Stock delivered upon conversion. No adjustment shall be made to the number of shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock into Series D Preferred Stock for any declared but unpaid dividends on the Series D-1 Preferred Stock that is converted into Series D Preferred Stock.

f. Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Voting Preferred Stock pursuant to this Section 4 or shares of Series D Preferred Stock upon conversion of shares of Series D-1 Preferred Stock pursuant to Section 5. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock or Series D Preferred Stock, as the case may be, in a name other than that in which the shares of Voting Preferred Stock or Series D-1 Preferred Stock, as the case may be, so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4. Adjustments to Conversion Price for Diluting Issues.

a. Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(1) “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(2) “**Series D Original Issue Date**” shall mean the date on which the first share of Series D Preferred Stock was issued.

(3) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(4) “**Additional Shares of Common Stock**” shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series D Original Issue Date and assuming, for this purpose, that all issued and outstanding shares of Series D-1 Preferred Stock have been converted into Series D Preferred Stock pursuant to Subsection 5.1.3 on the Series D Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, “**Exempted Securities**”):

- (a) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;

- (b) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8;
- (c) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation, including the Preferred Stock Director;
- (d) shares of Common Stock issued in connection with the listing of the Common Stock on a National Securities Exchange (as defined in Subsection 5.1.1(a));
- (e) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;
- (f) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Corporation, including the Preferred Stock Director;
- (g) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation, including the Preferred Stock Director;

- (h) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Corporation, including the Preferred Stock Director; or
- (i) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation, including the Preferred Stock Director.

b. No Adjustment of Conversion Price. No adjustment in the Series A Conversion Price, the Series A-2 Conversion Price or the Series B Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of shares of Series A Preferred Stock, Series A-2 Preferred Stock and Series B Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of Series A Preferred Stock, Series A-2 Preferred Stock and Series B Preferred Stock, voting together as a separate class, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series C Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series C Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series D Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series D Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

c. Deemed Issue of Additional Shares of Common Stock.

(1) If the Corporation at any time or from time to time after the Series D Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities and shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock pursuant to Subsection 5.1.3) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the

maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(2) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be, computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series A Conversion Price, Series A-2 Conversion Price, Series B Conversion Price, Series C Conversion Price or Series D Conversion Price as would have been obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price to an amount which exceeds the lower of (i) the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be, in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security and (ii) the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be, that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(3) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D

Conversion Price, as the case may be, then in effect, or because such Option or Convertible Security was issued before the Series D Original Issue Date), are revised after the Series D Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(4) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price pursuant to the terms of Subsection 4.4.4, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, shall be readjusted to such Series A Conversion Price, Series A-2 Conversion Price, Series B Conversion Price, Series C Conversion Price or Series D Conversion Price, as the case may be, as would have been obtained had such Option or Convertible Security (or portion thereof) never been issued.

(5) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

d. Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series D Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, each as in effect immediately prior to such issue, then the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(1) "CP₂" shall mean (1) in the case of an adjustment to the Series A Conversion Price, the Series A Conversion Price in effect immediately after such issue of Additional Shares of Common Stock, (2) in the case of an adjustment to the Series A-2 Conversion Price, the Series A-2 Conversion Price in effect immediately after such issue of Additional Shares of Common Stock, (3) in the case of an adjustment to the Series B Conversion Price, the Series B Conversion Price in effect immediately after such issue of Additional Shares of Common Stock, (4) in the case of an adjustment to the Series C Conversion Price, the Series C Conversion Price in effect immediately after such issue of Additional Shares of Common Stock and (5) in the case of an adjustment to the Series D Conversion Price, the Series D Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;

(2) "CP₁" shall mean (1) in the case of an adjustment to the Series A Conversion Price, the Series A Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock, (2) in the case of an adjustment to the Series A-2 Conversion Price, the Series A-2 Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock, (3) in the case of an adjustment to the Series B Conversion Price, the Series B Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock, (4) in the case of an adjustment to the Series C Conversion Price, the Series C Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock and (5) in the case of an adjustment to the Series D Conversion Price, the Series D Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(3) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor and conversion of all Series D-1 Preferred Stock into Series D Preferred Stock pursuant to Subsection 5.1.3) immediately prior to such issue);

(4) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and

(5) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

e. Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(1) Cash and Property: Such consideration shall:

- (a) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;
- (b) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director; and
- (c) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing

- (a) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments

relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

- (b) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

f. Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price pursuant to the terms of Subsection 4.4.4, and such issuance dates occur within a period of no more than 90 days from the first such issuance to the final such issuance, then, upon the final such issuance, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

5. Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series D Original Issue Date effect a subdivision of the outstanding Common Stock, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, each as in effect immediately before such subdivision, shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series D Original Issue Date combine the outstanding shares of Common Stock, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C

Conversion Price and the Series D Conversion Price, each as in effect immediately before such combination, shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

6. Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series D Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, each as in effect immediately before such event, shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, as the case may be, then in effect by a fraction:

(i) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(ii) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, as the case may be, shall be recomputed accordingly as of the close of business on such record date and thereafter the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price as the case may be, shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) no such adjustment shall be made with respect to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price if the holders of the applicable series of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of the applicable series of Preferred Stock had been converted into Common Stock on the date of such event.

7. Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series D Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to

receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

8. Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.5, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of the applicable series of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the applicable series of Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the applicable series of Preferred Stock.

9. Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of the applicable series of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the applicable series of Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a certificate setting forth (i) the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, then in effect and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of the applicable series of Preferred Stock.

10. Notice of Record Date. In the event:

(1) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(2) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(3) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

E. Mandatory Conversion.

1. Trigger Events.

a. Upon either (a) the listing of shares of Common Stock on the New York Stock Exchange, the NYSE MKT, the NASDAQ Stock Market, the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market or any successor thereto (each a “**National Securities Exchange**”) or (b) the date and time, or the occurrence of an event, specified by vote or written consent of both (i) the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of ABC Preferred Stock, voting together as a separate class, and (ii) the holders of a majority of the then outstanding shares of Series C Preferred Stock (the time of such listing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**ABC Mandatory Conversion Time**”), (A) all outstanding shares of ABC Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

b. Upon either (a) the listing of shares of Common Stock on a National Securities Exchange or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the then outstanding shares of Series D

Preferred Stock (the time of such listing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series D Mandatory Conversion Time**”), (A) all outstanding shares of Series D Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

c. Upon either (i) the expiration of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the “**HSR Act**”) such that a holder of Series D-1 Preferred Stock could acquire shares of Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock in compliance with the HSR Act or (ii) if applicable, a transfer of shares of Series D-1 Preferred Stock to a person that would not be required to make a filing under the HSR Act to acquire the shares of Series D Preferred Stock issuable upon conversion of such shares of Series D-1 Preferred Stock or the waiting period under the HSR Act applicable to such person acquiring such shares of Series D Preferred Stock has expired (either such event, a “**Series D-1 Triggering Event**”, and the date and time of such event is referred to herein as the “**Series D-1 Mandatory Conversion Time**”), each share of Series D-1 Preferred Stock held by such holder shall automatically be converted into one (1) share of Series D Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to either the Series D Preferred Stock or the Series D-1 Preferred Stock. The Corporation shall be sent written notice of any Series D-1 Triggering Event. Each holder of record of shares of Series D-1 Preferred Stock that has been or will be converted at a Series D-1 Mandatory Conversion Time shall be sent written notice of such Series D-1 Mandatory Conversion Time and the place designated for mandatory conversion of any shares of Series D-1 Preferred Stock pursuant to this Subsection 5.1.3. Such notice need not be sent in advance of the occurrence of any Series D-1 Mandatory Conversion Time. Upon receipt of such notice, a holder of shares of Series D-1 Preferred Stock converted at any Series D-1 Mandatory Conversion Time shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series D-1 Preferred Stock converted pursuant to this Subsection 5.1.3, including the rights, if any, to receive notices and vote (other than as a holder of Series D Preferred Stock), will terminate at the applicable Series D-1 Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.1.3. As soon as practicable after a Series D-1 Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series D-1 Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Series D Preferred Stock issuable on such conversion in accordance with the provisions hereof and the payment of any declared but unpaid dividends on the shares of Series D-1 Preferred

Stock converted. Such Series D-1 Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series D-1 Preferred Stock accordingly.

2. Mandatory Conversion Procedural Requirements.

a. All holders of record of shares of ABC Preferred Stock shall be sent written notice of the ABC Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of ABC Preferred Stock pursuant to Subsection 5.1.1. Such notice need not be sent in advance of the occurrence of the ABC Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of ABC Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the ABC Preferred Stock converted pursuant to Subsection 5.1.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the ABC Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2.1. As soon as practicable after the ABC Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for ABC Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of ABC Preferred Stock converted. Such ABC Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of each applicable series of ABC Preferred Stock accordingly.

b. All holders of record of shares of Series D Preferred Stock shall be sent written notice of the Series D Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series D Preferred Stock pursuant to Section 5.1.2. Such notice need not be sent in advance of the occurrence of the Series D Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series D Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or

destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series D Preferred Stock converted pursuant to Subsection 5.1.2, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Series D Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2.2. As soon as practicable after the Series D Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series D Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominee, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series D Preferred Stock converted. Such Series D Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series D Preferred Stock accordingly.

F. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

G. Waiver. Unless a different vote is specified in the Certificate of Incorporation, any of the rights, powers, preferences and other terms of the ABC Preferred Stock set forth herein may be waived, either prospectively or retrospectively, on behalf of all holders of ABC Preferred Stock by the affirmative written consent or vote of the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of the voting power of the shares of ABC Preferred Stock then outstanding. Unless a different vote is specified in the Certificate of Incorporation, any of the rights, powers, preferences and other terms of any series of Preferred Stock set forth herein may be waived, either prospectively or retrospectively, on behalf of all holders of such series of Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of such series of Preferred Stock then outstanding.

H. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “**Excluded Opportunity**” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, “**Covered Persons**”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a director of the Corporation.

ELEVENTH: The following indemnification provisions shall apply to the persons enumerated below.

a) Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an “**Indemnified Person**”) who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding,

whether civil, criminal, administrative or investigative (a “**Proceeding**”), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys’ fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article Eleventh, the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board of Directors.

b) Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys’ fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article Eleventh or otherwise.

c) Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this Article Eleventh is not paid in full within 30 days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

d) Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorney’s fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors.

e) Advancement of Expenses of Employees and Agents. The Corporation may pay the expenses (including attorney’s fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors.

f) Non-Exclusivity of Rights. The rights conferred on any person by this Article Eleventh shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

g) Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification from such other Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise.

h) Insurance. The Board of Directors may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article Eleventh; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article Eleventh.

i) Amendment or Repeal. Any repeal or modification of the foregoing provisions of this Article Eleventh shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

* * *

That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 19th day of December, 2014.

By: /s/ Roger J. Pomerantz, M.D.

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

**CERTIFICATE OF CORRECTION
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
SERES HEALTH, INC.**

Seres Health, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

1. The name of the Corporation is Seres Health, Inc., and that the Corporation was originally incorporated pursuant to the General Corporation Law of the State of Delaware on October 18, 2010 under the name Newco LS21, Inc.

2. The Amended and Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on December 19, 2014 (the "Restated Certificate") and such Restated Certificate requires correction as permitted by subsection (f) of Section 103 of the General Corporation Law of the State of Delaware.

3. The deficiency or defect of the Restated Certificate to be corrected hereby is as follows: due to a scrivener's error, the definition of the term "ABC Preferred Stock" in Article FOURTH, Part B, Subsection 3.2 inadvertently omitted reference to the Series A-2 Preferred Stock. The Restated Certificate is hereby corrected by deleting the first sentence of Subsection 3.2 of Part B of Article FOURTH of the Restated Certificate in its entirety and by substituting the following in lieu thereof:

"The holders of record of the shares of Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock and/or Series C Preferred Stock (together, the "**ABC Preferred Stock**"), exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the "**Preferred Stock Director**") and the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation."

IN WITNESS WHEREOF, Seres Health, Inc. has caused this Certificate of Correction to be executed this 17th day of February, 2015.

By: /s/ Roger J. Pomerantz, M.D.

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

**CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
SERES HEALTH, INC.**

Seres Health, Inc. (hereinafter called the “Corporation”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

1. That the name of this corporation is Seres Health, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on October 18, 2010 under the name Newco LS21, Inc.

2. The Board of Directors of the Corporation duly adopted resolutions by written consent in lieu of a meeting in accordance with Sections 141(f) and 242 of the General Corporation Law of the State of Delaware setting forth an amendment to the Certificate of Incorporation of the Corporation and declaring such amendment to be advisable. The stockholders of the Corporation duly approved such proposed amendment by written consent in accordance with Sections 228 and 242 of the General Corporation Law of the State of Delaware. The resolution setting forth the amendment is as follows:

RESOLVED, that the Restated Certificate of Incorporation of the Corporation is hereby amended by amending and restating Article FIRST thereof in its entirety to read as follows:

“FIRST: The name of this corporation is Seres Therapeutics, Inc. (the “**Corporation**”).”

3. This Certificate of Amendment of Restated Certificate of Incorporation of the Corporation has been duly adopted in accordance with Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed on this 20th day of May, 2015.

By: /s/ Roger J. Pomerantz

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

BY-LAWS OF
NEWCO LS21, INC.
A DELAWARE CORPORATION

Dated: October 15, 2010

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BY-LAWS

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ARTICLE I

MEETINGS OF STOCKHOLDERS

Section 1. Place of Meetings. All meetings of the stockholders shall be held at such place within or without the State of Delaware as may be fixed from time to time by the Board of Directors or the Chief Executive Officer, or if not so designated, at the registered office of the Corporation.

Section 2. Annual Meeting. Unless directors are elected by written consent in lieu of an annual meeting as permitted by law and these By-Laws, an annual meeting of stockholders shall be held at such date and time as shall be designated from time to time by the Board of Directors or the Chief Executive Officer, at which meeting the stockholders shall elect by a plurality vote a board of directors and shall transact such other business as may be properly brought before the meeting. If no annual meeting is held in accordance with the foregoing provisions, the Board of Directors shall cause the meeting to be held as soon thereafter as convenient, which meeting shall be designated a special meeting in lieu of annual meeting.

Section 3. Special Meetings. Special meetings of the stockholders, for any purpose or purposes, may, unless otherwise prescribed by statute or by the certificate of incorporation, be called by the Board of Directors or the Chief Executive Officer and shall be called by the Chief Executive Officer or Secretary at the request in writing of a majority of the Board of Directors, or at the request in writing of stockholders owning a *majority in* amount of the entire capital stock of the Corporation issued and outstanding and entitled to vote. Such request shall state the purpose or purposes of the proposed meeting. Business transacted at any special meeting shall be limited to matters relating to the purpose or purposes stated in the notice of meeting.

Section 4. Notice of Meetings. Except as otherwise provided by law, written notice of each meeting of stockholders, annual or special, stating the place, date and hour of the meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is called, shall be given not less than ten (10) or more than sixty (60) days before the date of the meeting, to each stockholder entitled to vote at such meeting.

Section 5. Voting List. The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days

prior to the meeting, either at a place within the city or town where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

Section 6. Quorum. The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business, except as otherwise provided by statute, the certificate of incorporation or these By-Laws. Where a separate vote by a class or classes is required, one-third of the outstanding shares of such class or classes, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter. If no quorum shall be present or represented at any meeting of stockholders, such meeting may be adjourned in accordance with Section 7 hereof, until a quorum shall be present or represented.

Section 7. Adjournments. Any meeting of stockholders may be adjourned from time to time to any other time and to any other place at which a meeting of stockholders may be held under these By-Laws, which time and place shall be announced at the meeting, by a majority of the stockholders present in person or represented by proxy at the meeting and entitled to vote (whether or not a quorum is present), or, if no stockholder is present or represented by proxy, by any officer entitled to preside at or to act as Secretary of such meeting, without notice other than announcement at the meeting. At such adjourned meeting, any business may be transacted which might have been transacted at the original meeting, provided that a quorum either was present at the original meeting or is present at the adjourned meeting. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 8. Action at Meetings. When a quorum is present at any meeting, the affirmative vote of the holders of a majority of the stock present in person or represented by proxy, entitled to vote and voting on the matter (or where a separate vote by a class or classes is required, the affirmative vote of the majority of shares of such class or classes present in person or represented by proxy at the meeting) shall decide any matter (other than the election of Directors) brought before such meeting, unless the matter is one upon which by express provision of law, the certificate of incorporation or these By-Laws, a different vote is required, in which case such express provision shall govern and control the decision of such matter. The stock of holders who abstain from voting on any matter shall be deemed not to have been voted on such matter. Directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting, entitled to vote and voting on the election of Directors.

Section 9. Voting and Proxies. Unless otherwise provided in the certificate of incorporation, each stockholder shall at every meeting of the stockholders be entitled to one vote for each share of capital stock having voting power held of record by such stockholder. Each stockholder entitled to vote at a meeting of stockholders, or to express consent or dissent to

corporate action in writing without a meeting, may authorize another person or persons to act for him by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period.

Section 10. Action Without Meeting. Any action required to be taken at any annual or special meeting of stockholders, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be (1) signed and dated by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and (2) delivered to the Corporation within sixty days of the earliest dated consent by delivery to its registered office in the State of Delaware (in which case delivery shall be by hand or by certified or registered mail, return receipt requested), its principal place of business, or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.

ARTICLE II

DIRECTORS

Section 1. Number, Election, Tenure and Qualification. The number of Directors which shall constitute the whole board shall be not less than one. Within such limit, the number of Directors shall be determined by resolution of the Board of Directors or by the stockholders at the annual meeting or at any special meeting of stockholders. The directors shall be elected at the annual meeting or at any special meeting of stockholders, or by written consent in lieu of an annual or special meeting of the stockholders (provided, however, that if such consent is less than unanimous, such action by written consent may be in lieu of holding an annual meeting only if all of the directorships to which directors could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action), except as provided in section 3 of this Article, and each director elected shall hold office until his successor is elected and qualified, unless sooner displaced. Directors need not be stockholders.

Section 2. Enlargement. The number of the Board of Directors may be increased at any time by vote of a majority of the Directors then in office.

Section 3. Vacancies. Vacancies and newly created Directorships resulting from any increase in the authorized number of Directors may be filled by a majority of the Directors then in office, though less than a quorum, or by a sole remaining director, and the Directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced. If there are no Directors in office, then an election of Directors may be held in the manner provided by statute. In the event of a vacancy in the Board of Directors, the remaining Directors, except as otherwise provided by law or these By-Laws, may exercise the powers of the full board until the vacancy is filled.

Section 4. Resignation and Removal. Any director may resign at any time upon written notice to the Corporation at its principal place of business or to the Chief Executive Officer or Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event. Any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of Directors, unless otherwise specified by law or the certificate of incorporation.

Section 5. General Powers. The business and affairs of the Corporation shall be managed by its Board of Directors, which may exercise all powers of the Corporation and do all such lawful acts and things as are not by statute or by the certificate of incorporation or by these By-Laws directed or required to be exercised or done by the stockholders.

Section 6. Chairman of the Board. If the Board of Directors appoints a chairman of the board, he shall, when present, preside at all meetings of the stockholders and the Board of Directors. He shall perform such duties and possess such powers as are customarily vested in the office of the chairman of the board or as may be vested in him by the Board of Directors.

Section 7. Place of Meetings. The Board of Directors may hold meetings, both regular and special, either within or without the State of Delaware.

Section 8. Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the board; provided that any director who is absent when such a determination is made shall be given prompt notice of such determination. A regular meeting of the Board of Directors may be held without notice immediately after and at the same place as the annual meeting of stockholders.

Section 9. Special Meetings. Special meetings of the board may be called by the Chief Executive Officer, Secretary, or on the written request of two (2) or more Directors, or by one director in the event that there is only one director in office. Two (2) days' notice to each director, either personally or by telegram, cable, telecopy, electronic mail, commercial delivery service, telex or similar means sent to his business or home address, or three (3) days' notice by written notice deposited in the mail, shall be given to each director by the Secretary or by the officer or one of the Directors calling the meeting. A notice or waiver of notice of a meeting of the Board of Directors need not specify the purposes of the meeting.

Section 10. Quorum, Action at Meeting, Adjournments. At all meetings of the board a majority of Directors then in office, but in no event less than one third of the entire board, shall constitute a quorum for the transaction of business and the act of a majority of the Directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by law or by the certificate of incorporation. For purposes of this section, the term "entire board" shall mean the number of Directors last fixed by the stockholders or Directors, as the case may be, in accordance with law and these By- Laws; provided, however, that if less than all the number so fixed of Directors were elected, the

“entire board” shall mean the greatest number of Directors so elected to hold office at any one time pursuant to such authorization. If a quorum shall not be present at any meeting of the Board of Directors, a majority of the Directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

Section 11. Action by Consent. Unless otherwise restricted by the certificate of incorporation or these By-Laws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the board or committee.

Section 12. Telephonic Meetings. Unless otherwise restricted by the certificate of incorporation or these By-Laws, members of the Board of Directors or of any committee thereof may participate in a meeting of the Board of Directors or of any committee, as the case may be, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

Section 13. Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the Directors of the Corporation. The board may designate one or more Directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (a) adopting, amending or repealing the By-Laws of the Corporation or any of them or (b) approving or adopting, or recommending to the stockholders any action or matter expressly required by law to be submitted to stockholders for approval. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board of Directors. Each committee shall keep regular minutes of its meetings and make such reports to the Board of Directors as the Board of Directors may request. Except as the Board of Directors may otherwise determine, any committee may make rules for the conduct of its business, but unless otherwise provided by the Directors or in such rules, its business shall be conducted as nearly as possible in the same manner as is provided in these By- Laws for the conduct of its business by the Board of Directors.

Section 14. Compensation. Unless otherwise restricted by the certificate of incorporation or these By-Laws, the Board of Directors shall have the authority to fix from time to time the compensation of Directors. The Directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and the performance of their responsibilities as Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors and/or a stated salary as director. No such payment shall preclude any director from serving the Corporation or its parent or subsidiary corporations in any other capacity and receiving compensation therefor. The Board of Directors may also allow compensation for members of special or standing committees for service on such committees.

ARTICLE III

OFFICERS

Section 1. Enumeration. The officers of the Corporation shall be chosen by the Board of Directors and shall be a President, a Secretary and a Treasurer and such other officers with such titles, terms of office and duties as the Board of Directors may from time to time determine, including a Chairman of the Board, one or more Vice-Presidents, and one or more Assistant Secretaries and Assistant Treasurers. If authorized by resolution of the Board of Directors, the Chief Executive Officer may be empowered to appoint from time to time Assistant Secretaries and Assistant Treasurers. Any number of offices may be held by the same person, unless the Certificate of Incorporation or these By-Laws otherwise provide.

Section 2. Election. The Board of Directors at its first meeting after each annual meeting of stockholders shall choose a President, a Secretary and a Treasurer. Other officers may be appointed by the Board of Directors at such meeting, at any other meeting, or by written consent.

Section 3. Tenure. The officers of the Corporation shall hold office until their successors are chosen and qualify, unless a different term is specified in the vote choosing or appointing him, or until his earlier death, resignation or removal. Any officer elected or appointed by the Board of Directors or by the Chief Executive Officer may be removed at any time, with or without cause, by the affirmative vote of a majority of the Board of Directors or a committee duly authorized to do so, except that any officer appointed by the Chief Executive Officer may also be removed at any time, with or without cause, by the Chief Executive Officer. Any vacancy occurring in any office of the Corporation may be filled by the Board of Directors, at its discretion. Any officer may resign by delivering his written resignation to the Corporation at its principal place of business or to the Chief Executive Officer or the Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

Section 4. President. The President shall be the Chief Operating Officer of the Corporation. He shall also be the Chief Executive Officer unless the Board of Directors otherwise provides. If no Chief Executive Officer shall have been appointed by the Board of Directors, all references herein to the "Chief Executive Officer" shall be to the President. The President shall, unless the Board of Directors provides otherwise in a specific instance or generally, preside at all meetings of the stockholders and the Board of Directors, have general and active management of the business of the Corporation and see that all orders and resolutions of the Board of Directors are carried into effect. The President shall execute bonds, mortgages, and other contracts requiring a seal, under the seal of the Corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the Corporation.

Section 5. Vice-Presidents. In the absence of the President or in the event of his or her inability or refusal to act, the Vice-President, or if there be more than one Vice-President, the Vice-Presidents in the order designated by the Board of Directors or the Chief Executive Officer (or in the absence of any designation, then in the order determined by their tenure in office) shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. The Vice-Presidents shall perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer may from time to time prescribe.

Section 6. Secretary. The Secretary shall have such powers and perform such duties as are incident to the office of Secretary. The Secretary shall maintain a stock ledger and prepare lists of stockholders and their addresses as required and shall be the custodian of corporate records. The Secretary shall attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings of the meetings of the Corporation and of the Board of Directors in a book to be kept for that purpose and shall perform like duties for the standing committees when required. The Secretary shall give, or cause to be given, notice of all meetings of the Stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be from time to time prescribed by the Board of Directors or Chief Executive Officer, under whose supervision the Secretary shall be. The Secretary shall have custody of the corporate seal of the Corporation and the Secretary, or an assistant Secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his or her signature or by the signature of such assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest the affixing by his or her signature.

Section 7. Assistant Secretaries. The assistant Secretary, or if there be more than one, the assistant secretaries in the order determined by the Board of Directors, the Chief Executive Officer or the Secretary (or if there be no such determination, then in the order determined by their tenure in office), shall, in the absence of the Secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the Secretary and shall perform such other duties and have such other powers as the Board of Directors, the Chief Executive Officer or the Secretary may from time to time prescribe. In the absence of the Secretary or any assistant Secretary at any meeting of stockholders or Directors, the person presiding at the meeting shall designate a temporary or acting Secretary to keep a record of the meeting.

Section 8. Treasurer. The Treasurer shall perform such duties and shall have such powers as may be assigned to him or her by the Board of Directors or the Chief Executive Officer. In addition, the Treasurer shall perform such duties and have such powers as are incident to the office of Treasurer. The Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. He shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the Chief Executive Officer and the Board of Directors, when the Chief Executive Officer or Board of Directors so requires, an account of all his or her transactions as Treasurer and of the financial condition of the Corporation.

Section 9. Assistant Treasurers. The assistant Treasurer, or if there shall be more than one, the assistant Treasurers in the order determined by the Board of Directors, the Chief Executive Officer or the Treasurer (or if there be no such determination, then in the order determined by their tenure in office), shall, in the absence of the Treasurer or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the Treasurer and shall perform such other duties and have such other powers as the Board of Directors, the Chief Executive Officer or the Treasurer may from time to time prescribe.

Section 10. Bond. If required by the Board of Directors, any officer shall give the Corporation a bond in such sum and with such surety or sureties and upon such terms and conditions as shall be satisfactory to the Board of Directors, including without limitation a bond for the faithful performance of the duties of his office and for the restoration to the Corporation of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control and belonging to the Corporation.

ARTICLE IV

NOTICES

Section 1. Delivery. Whenever, under the provisions of law, or of the Certificate of Incorporation or these By-Laws, written notice is required to be given to any director or stockholder, such notice may be given by mail, addressed to such director or stockholder, at his address as it appears on the records of the Corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Unless written notice by mail is required by law, written notice may also be given by telegram, cable, teletype, commercial delivery service, telex or similar means, addressed to such director or stockholder at his address as it appears on the records of the corporation, in which case such notice shall be deemed to be given when delivered into the control of the persons charged with effecting such transmission, the transmission charge to be paid by the Corporation or the person sending such notice and not by the addressee. Oral notice or other in-hand delivery (in person or by telephone) shall be deemed given at the time it is actually given.

Section 2. Waiver of Notice. Whenever any notice is required to be given under the provisions of law or of the certificate of incorporation or of these By-Laws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

ARTICLE V

INDEMNIFICATION

Section 1. Actions other than by or in the Right of the Corporation. The corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceedings, had no reasonable cause to believe such person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

Section 2. Actions by or in the Right of the Corporation. The corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery of the State of Delaware or such other court shall deem proper.

Section 3. Success on the Merits. To the extent that any person described in Section 1 or 2 of this Article V has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in said Sections, or in defense of any claim, issue or matter therein, he shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him in connection therewith.

Section 4. Specific Authorization. Any indemnification under Section 1 or 2 of this Article V (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of any person described in said Sections is proper in the circumstances because he has met the applicable standard of conduct set forth in said Sections. Such determination shall be made (1) by the Board of Directors by a majority vote of Directors who were not parties to such action, suit or proceeding (even though less than a quorum), or (2) if there are no disinterested Directors or if a majority of disinterested Directors so directs, by independent legal counsel (who may be regular legal counsel to the Corporation) in a written opinion, or (3) by the stockholders of the Corporation.

Section 5. Advance Payment. Expenses incurred in defending a pending or threatened civil or criminal action, suit or proceeding may be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of any person described in said Section to repay such amount if it shall ultimately be determined that he or she is not entitled to indemnification by the Corporation as authorized in this Article V.

Section 6. Non-Exclusivity. The indemnification and advancement of expenses provided by, or granted pursuant to, the other Sections of this Article V shall not be deemed exclusive of any other rights to which those provided indemnification or advancement of expenses may be entitled under any By-Law, agreement, vote of stockholders or disinterested Directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office.

Section 7. Insurance. The Board of Directors may authorize, by a vote of the majority of the full board, the Corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify him against such liability under the provisions of this Article V.

Section 8. Continuation of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article V shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 9. Severability. If any word, clause or provision of this Article V or any award made hereunder shall for any reason be determined to be invalid, the provisions hereof shall not otherwise be affected thereby but shall remain in full force and effect.

Section 10. Intent of Article. The intent of this Article V is to provide for indemnification and advancement of expenses to the fullest extent permitted by Section 145 of the General Corporation Law of Delaware. To the extent that such Section or any successor section may be amended or supplemented from time to time, this Article V shall be amended automatically and construed so as to permit indemnification and advancement of expenses to the fullest extent from time to time permitted by law.

ARTICLE VI

CAPITAL STOCK

Section 1. Certificates of Stock. Every holder of stock in the Corporation shall be entitled to have a certificate, signed by, or in the name of the Corporation by, the chairman or Vice-chairman of the Board of Directors, or the President or a Vice-President and the Treasurer or an assistant Treasurer, or the Secretary or an assistant Secretary of the Corporation, certifying the number of shares owned by such holder in the Corporation. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue. Certificates may be issued for partly paid shares and in such case upon the face or back of the certificates issued to represent any such partly paid shares, the total amount of the consideration to be paid therefor, and the amount paid thereon shall be specified.

Section 2. Lost Certificates. The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the Corporation alleged to have been lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to give reasonable evidence of such loss, theft or destruction, to advertise the same in such manner as it shall require and/or to give the Corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen or destroyed or the issuance of such new certificate.

Section 3. Transfer of Stock. Upon surrender to the Corporation or the transfer agent of the Corporation of a certificate for shares, duly endorsed or accompanied by proper evidence of succession, assignment or authority to transfer, and proper evidence of compliance with other conditions to rightful transfer, it shall be the duty of the Corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

Section 4. Record Date. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which shall not be more than sixty days nor less than ten days before the date of such meeting. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting. If no record date is fixed, the

record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day before the day on which notice is given, or, if notice is waived, at the close of business on the day before the day on which the meeting is held. In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which shall not be more than ten days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no record date is fixed, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by statute, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation as provided in Section 10 of Article I. If no record date is fixed and prior action by the Board of Directors is required, the record date for determining Stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the date on which the Board of Directors adopts the resolution taking such prior action. In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which shall not precede the date upon which the resolution fixing the record date is adopted, and which shall be not more than sixty days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating to such purpose.

Section 5. Registered Stockholders. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII

CERTAIN TRANSACTIONS

Section 1. Transactions with Interested Parties. No contract or transaction between the Corporation and one or more of its Directors or officers, or between the Corporation and any other corporation, partnership, association, or other organization in which one or more of its Directors or officers are Directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the board or committee thereof which authorizes the contract or transaction or solely because his or their votes are counted for such purpose, if:

(a) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested Directors, even though the disinterested Directors be less than a quorum; or

(b) The material facts as to his relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or

(c) The contract or transaction is fair as to the Corporation as of the time it is authorized, approved or ratified, by the Board of Directors, a committee thereof, or the stockholders.

Section 2. Quorum. Common or interested Directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

ARTICLE VIII

GENERAL PROVISIONS

Section 1. Dividends. Dividends upon the capital stock of the corporation, if any, may be declared by the Board of Directors at any regular or special meeting or by written consent, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation.

Section 2. Reserves. The Directors may set apart out of any funds of the Corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve.

Section 3. Checks. All checks or demands for money and notes of the Corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

Section 4. Fiscal Year. The fiscal year of the Corporation shall be fixed by resolution of the Board of Directors.

Section 5. Seal. The Board of Directors may, by resolution, adopt a corporate seal. The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the word "Delaware." The seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise. The seal may be altered from time to time by the Board of Directors.

ARTICLE IX

AMENDMENTS

These By-Laws may be altered, amended or repealed or new By-Laws may be adopted by the stockholders or by the Board of Directors, when such power is conferred upon the Board of Directors by the certificate of incorporation, at any regular meeting of the stockholders or of the Board of Directors or at any special meeting of the stockholders or of the Board of Directors provided, however, that in the case of a regular or special meeting of stockholders, notice of such alteration, amendment, repeal or adoption of new By-Laws be contained in the notice of such meeting.

RESTATED CERTIFICATE OF INCORPORATION

OF

SERES THERAPEUTICS, INC.

(originally incorporated as Newco LS21, Inc. on October 18, 2010)

FIRST: The name of the Corporation is Seres Therapeutics, Inc.

SECOND: The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street in the City of Wilmington, County of New Castle, Zip Code 19801. The name of its registered agent at that address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 210,000,000 shares, consisting of (a) 200,000,000 shares of Common Stock, \$0.001 par value per share ("Common Stock"), and (b) 10,000,000 shares of Preferred Stock, \$0.001 par value per share ("Preferred Stock").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK.

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the Board of Directors upon any issuance of the Preferred Stock of any series.

2. Voting. The holders of the Common Stock shall have voting rights at all meetings of stockholders, each such holder being entitled to one vote for each share thereof held by such holder; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation (which, as used herein, shall mean the certificate of incorporation of the Corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation or the General Corporation Law of the State of Delaware. There shall be no cumulative voting.

The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

3. Dividends. Dividends may be declared and paid on the Common Stock if, as and when determined by the Board of Directors subject to any preferential dividend or other rights of any then outstanding Preferred Stock and to the requirements of applicable law.

4. Liquidation. Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential or other rights of any then outstanding Preferred Stock.

B. PREFERRED STOCK.

Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors of the Corporation as hereinafter provided.

Authority is hereby expressly granted to the Board of Directors from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by adopting a resolution or resolutions providing for the issuance of the shares thereof and by filing a certificate of designations relating thereto in accordance with the General Corporation Law of the State of Delaware, to determine and fix the number of shares of such series and such voting powers, full or limited, or no voting powers, and such designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the fullest extent now or hereafter permitted by the General Corporation Law of the State of Delaware. The powers, preferences and relative, participating, optional and other special rights of each such series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding. Without limiting the generality of the foregoing, the resolution or resolutions providing for the issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to any other series of Preferred Stock to the extent permitted by law.

Subject to the rights of the holders of any series of Preferred Stock pursuant to the terms of this Certificate of Incorporation or any resolution or resolutions providing for the issuance of such series of stock adopted by the Board of Directors, the number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

FIFTH: Except as otherwise provided herein, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders, directors or any other persons herein are granted subject to this reservation.

SIXTH: In furtherance and not in limitation of the powers conferred upon it by the General Corporation Law of the State of Delaware, and subject to the terms of any series of Preferred Stock, the Board of Directors shall have the power to adopt, amend, alter or repeal the Bylaws of the Corporation. The stockholders may not adopt, amend, alter or repeal the Bylaws of the Corporation, or adopt any provision inconsistent therewith, unless such action is approved, in addition to any other vote required by this Certificate of Incorporation, by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon. Notwithstanding any other provisions of law, this Certificate of Incorporation or the Bylaws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article SIXTH.

SEVENTH: Except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to permit further elimination or limitation of the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware as so amended.

EIGHTH: This Article EIGHTH is inserted for the management of the business and for the conduct of the affairs of the Corporation.

1. General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

2. Number of Directors; Election of Directors. Subject to the rights of holders of any series of Preferred Stock to elect directors, the number of directors of the Corporation shall be established from time to time by the Board of Directors. Election of directors need not be by written ballot, except as and to the extent provided in the Bylaws of the Corporation.

3. Classes of Directors. Subject to the rights of holders of any series of Preferred Stock to elect directors, the Board of Directors shall be and is divided into three classes, designated as

Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire Board of Directors. The Board of Directors is authorized to assign members of the Board of Directors to Class I, Class II or Class III.

4. Terms of Office. Subject to the rights of holders of any series of Preferred Stock to elect directors, each director shall serve for a term ending on the date of the third annual meeting of stockholders following the annual meeting of stockholders at which such director was elected; provided that each director initially assigned to Class I shall serve for a term expiring at the Corporation's first annual meeting of stockholders held after the effectiveness of this Certificate of Incorporation; each director initially assigned to Class II shall serve for a term expiring at the Corporation's second annual meeting of stockholders held after the effectiveness of this Certificate of Incorporation; and each director initially assigned to Class III shall serve for a term expiring at the Corporation's third annual meeting of stockholders held after the effectiveness of this Certificate of Incorporation; provided further, that the term of each director shall continue until the election and qualification of his or her successor and be subject to his or her earlier death, resignation or removal.

5. Quorum. The greater of (a) a majority of the directors at any time in office and (b) one-third of the number of directors fixed pursuant to Section 2 of this Article EIGHTH shall constitute a quorum of the Board of Directors. If at any meeting of the Board of Directors there shall be less than such a quorum, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until a quorum shall be present.

6. Action at Meeting. Every act or decision done or made by a majority of the directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors unless a greater number is required by law or by this Certificate of Incorporation.

7. Removal. Subject to the rights of holders of any series of Preferred Stock, directors of the Corporation may be removed but only for cause and only by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote at an election of directors.

8. Vacancies. Subject to the rights of holders of any series of Preferred Stock, any vacancy or newly created directorship in the Board of Directors, however occurring, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director and shall not be filled by the stockholders, unless the Board of Directors determines by resolution that any such vacancy or newly created directorship shall be filled by the stockholders. A director elected to fill a vacancy shall hold office until the next election of the class for which such director shall have been chosen, subject to the election and qualification of a successor and to such director's earlier death, resignation or removal.

9. Stockholder Nominations and Introduction of Business, Etc. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before a meeting of stockholders shall be given in the manner provided by the Bylaws of the Corporation.

10. Amendments to Article. Notwithstanding any other provisions of law, this Certificate of Incorporation or the Bylaws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article EIGHTH.

NINTH: No action that is required or permitted to be taken by the stockholders of the Corporation at any annual or special meeting of stockholders may be effected by written consent of stockholders in lieu of a meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the Bylaws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article NINTH.

TENTH: Special meetings of stockholders for any purpose or purposes may be called at any time only by the Board of Directors, the chairperson of the Board of Directors, the chief executive officer or the president (in the absence of a chief executive officer), and may not be called by any other person or persons. Business transacted at any special meeting of stockholders shall be limited to the purpose or purposes stated in the notice of meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the Bylaws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article TENTH.

ELEVENTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of the Corporation, (b) any action asserting a claim of breach of fiduciary duty owed by any director, officer, employee or stockholder of the Corporation to the Corporation or the Corporation's stockholders, (c) any action asserting a claim arising pursuant to any provision of the General Corporation Law of the State of Delaware or as to which the General Corporation Law of the State of Delaware confers jurisdiction on the Court of Chancery of the State of Delaware or (d) any action asserting a claim governed by the internal affairs doctrine, in each case subject to said Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein; provided that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. To the fullest extent permitted by applicable law, any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article ELEVENTH. Notwithstanding any other provisions

of law, this Certificate of Incorporation or the Bylaws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article ELEVENTH. If any provision or provisions of this Article ELEVENTH shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article ELEVENTH (including, without limitation, each portion of any sentence of this Article ELEVENTH containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

IN WITNESS WHEREOF, this Certificate of Incorporation, which restates, integrates and amends the certificate of incorporation of the Corporation, and which has been duly adopted in accordance with Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware, has been executed by its duly authorized officer this [—] day of [—], 2015.

SERES THERAPEUTICS, INC.

By: _____
Name: Roger J. Pomerantz, M.D.
Title: President and Chief Executive Officer

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT is made as of the 19th day of December, 2014, by and among Seres Health, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**."

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") possess registration rights, information rights, rights of first offer, and other rights pursuant to an Amended and Restated Investors' Rights Agreement dated as of November 24, 2014, between the Company and such Investors (as amended, the "**Prior Agreement**");

WHEREAS, the Existing Investors desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, one of the Investors is a party to that certain Series D Preferred Stock Purchase Agreement of even date herewith between the Company and such Investor (the "**Purchase Agreement**"), under which certain of the Company's and such Investor's obligations are conditioned upon the execution and delivery of this Agreement by the parties hereto;

NOW, THEREFORE, the Company and the Existing Investors hereby agree to amend and restate the Prior Agreement in its entirety as set forth herein, and all of the parties hereto further agree as follows:

1. **Definitions.** For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital or other investment fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company or investment advisor with, such Person.

1.2 "**Common Stock**" means shares of the Company's common stock, par value \$0.001 per share.

1.3 "**Damages**" means any loss, damage, or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.4 “**Derivative Securities**” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.5 “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.6 “**Excluded Registration**” means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.7 “**Form S-1**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.8 “**Form S-3**” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.9 “**GAAP**” means generally accepted accounting principles in the United States.

1.10 “**Holder**” means any holder of Registrable Securities who is a party to this Agreement.

1.11 “**Immediate Family Member**” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.12 “**Initiating Holders**” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.13 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.14 “**Key Employee**” means any executive-level employee (including division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.15 “**Major Investor**” means (i) any Investor that, individually or together with such Investor’s Affiliates, holds at least 281,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof) and (ii) any Investor that, individually or together with such Investor’s Affiliates, holds at least 164,430 shares of Series C Preferred Stock (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.16 “**New Securities**” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.17 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.18 “**Preferred Director**” means the director of the Company that the holders of record of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are entitled to elect pursuant to the Company’s Certificate of Incorporation.

1.19 “**Preferred Stock**” means shares of Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock.

1.20 “**Registrable Securities**” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) the Common Stock held by Flagship VentureLabs IV LLC as of the date of the Prior Agreement (including without limitation and for the avoidance of doubt the Common Stock acquired by Nestlé Health Science US Holdings, Inc. (“**Nestlé**”) pursuant to the Stock Purchase Agreement dated as of December 19, 2014, by and between Flagship VentureLabs IV LLC and Nestlé (the “**Common Stock Purchase Agreement**”)); (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) and (ii) above; and (iv) the Common Stock issued or issuable to Comerica Ventures Incorporated, its successors and assigns, upon conversion of shares of any securities of the Company (including without limitation Series A-2 Preferred Stock) issuable upon exercise of the warrant issued by the Company to Comerica Bank pursuant to that certain Loan and Security Agreement, dated as of September 9, 2013, between the Company and Comerica Bank, as may be amended and/or restated from time to time; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.21 “**Registrable Securities then outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.22 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Subsection 2.12(b) hereof.

1.23 “**SEC**” means the Securities and Exchange Commission.

1.24 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.25 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.26 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.27 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

1.28 “**Series A Preferred Stock**” means shares of the Company’s Series A Preferred Stock, par value \$0.001 per share.

1.29 “**Series A-2 Preferred Stock**” means shares of the Company’s Series A-2 Preferred Stock, par value \$0.001 per share.

1.30 “**Series B Preferred Stock**” means shares of the Company’s Series B Preferred Stock, par value \$0.001 per share.

1.31 “**Series C Preferred Stock**” means shares of the Company’s Series C Preferred Stock, par value \$0.001 per share.

1.32 “**Series C Purchase Agreement**” means that certain Series C Preferred Stock Purchase Agreement, dated as of November 24, 2014, by and among the Company and the purchasers named therein.

1.33 “**Series D Preferred Stock**” means shares of the Company’s Series D Preferred Stock, par value \$0.001 per share.

1.34 “**Series D-1 Preferred Stock**” means shares of the Company’s Series D-1 Preferred Stock, par value \$0.001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five (5) years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of a

majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement for which the anticipated aggregate offering price would exceed \$10,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsection 2.1(c) and Subsection 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least thirty percent (30%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price of at least \$5,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsection 2.1(c) and Subsection 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Company’s Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than ninety (90) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such ninety (90) day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a) (i) during the period that is sixty (60) days before the Company’s good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration,

provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Subsection 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d), until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration or the IPO), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by a majority in interest of the Initiating Holders, subject only to the reasonable approval of the Company. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant

hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, and (ii) the number of Registrable Securities included in the offering be reduced below thirty percent (30%) of the total number of securities included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Subsection 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Subsection 2.3(a), fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 **Obligations of the Company.** Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements of one counsel for the selling Holders selected by the Holders of a majority of the Registrable Securities to be registered ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsection 2.1(a) or Subsection 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such

expenses and shall not forfeit their right to one registration pursuant to Subsection 2.1(a) or Subsection 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel, accountants and investment advisors for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such

fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S 3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a

majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would provide to such holder the right to include securities in any registration on other than a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder.

2.11 “Market Stand off” Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement for such IPO, and shall be applicable to the Holders only if all officers and directors of the Company and holders of at least one percent (1%) of the outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding shares of Preferred Stock) are subject to the same restrictions. The underwriters in connection with such registration are intended third party beneficiaries of this Subsection 2.11 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred in violation of this Agreement, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of Registrable Securities pursuant to an effective registration statement under the Securities Act or, following the IPO, SEC Rule 144 to be bound by the terms of this Subsection 2.12 if the transferred securities do not remain Registrable Securities hereunder following such transfer.

(b) Each certificate or instrument representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction or, following the IPO, the transfer is made pursuant to SEC Rule 144, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that, with respect to transfers following the IPO under the foregoing clause (y), each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144 or pursuant to an effective registration statement under the Securities Act, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsection 2.1 or Subsection 2.2 shall terminate upon the earliest to occur of:

(a) the closing of a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation;

(b) such time after the IPO as SEC Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration; and

(c) the fifth (5th) anniversary of the IPO.

3. Information Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor and each Investor owning shares of Series C Preferred Stock purchased from the Company pursuant to the Series C Purchase Agreement, provided that the Board of Directors has not reasonably determined that such Major Investor or Investor, as the case may be, is a competitor of the Company:

(a) as soon as practicable, but in any event within one hundred twenty (120) days after the end of each fiscal year of the Company, (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants selected by the Company and approved by the Board of Directors, including the Preferred Director;

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and of cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit any Major Investor to calculate its percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct; and

(d) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1 to provide information (i) that the Company reasonably determines in good faith to be confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or a trade secret or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date sixty (60) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

Notwithstanding anything else in this Subsection 3.1 to the contrary, (x) the Company shall not be obligated to provide any information under Subsection 3.1(d) to the Major Investor that purchased Series D Preferred Stock from the Company pursuant to the Purchase Agreement, or any of its permitted transferees, and (y) the Company shall not be obligated to provide any information under Subsection 3.1 to the Major Investor that purchased Series D Preferred Stock from the Company pursuant to the Purchase Agreement, or any of its permitted transferees, unless such Major Investor continues to own shares representing at least fifty percent (50%) of the combined aggregate voting power of (1) the shares of Series D Preferred Stock and Series D-1 Preferred Stock purchased by such Major Investor pursuant to the Purchase Agreement and (2) the shares of Common Stock purchased by such Major Investor pursuant to the Stock Purchase Agreement, dated as of December 19, 2014, by and between the Flagship VentureLabs IV LLC and such Major Investor.

3.2 Inspection. The Company shall permit each Major Investor (provided that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company), at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or a trade secret or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Termination of Information Rights. The covenants set forth in Subsection 3.1 and Subsection 3.2 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, unless the consideration received by the Investors is in the form of securities that are privately held, whichever event occurs first.

3.4 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.4 by such Investor), (b) is or has been independently developed or conceived by any Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to any Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information: (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.4; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, provided that such Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it among itself and its Affiliates in such proportions as it deems appropriate.

(a) The Company shall give notice (the "**Offer Notice**") to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the

price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by such Major Investor bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such twenty (20) day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a “**Fully Exercising Investor**”) of any other Major Investor’s failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Company’s Certificate of Incorporation); or (ii) shares of Common Stock issued in the IPO.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company’s Certificate of Incorporation, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall use its commercially reasonable efforts to (i) maintain Directors and Officers liability insurance and (ii) upon the request of the Board of

Directors or the holders of a majority of the Registrable Securities then outstanding, term “key person” insurance on the Chief Executive Officer of the Company, in each case from financially sound and reputable insurers and in an amount and on terms and conditions satisfactory to the Board of Directors. The Company will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. The “key person” policy shall name the Company as loss payee and neither policy shall be cancelable by the Company without prior approval by the Board of Directors, including the Preferred Director.

5.2 Employee Agreements. The Company will cause (i) each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement and (ii) each Key Employee to enter into a one (1) year noncompetition and nonsolicitation agreement, each in a form acceptable to the Investors. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the consent of the Preferred Director.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including the approval of the Preferred Director, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company’s capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal quarterly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in Subsection 2.11. In addition, unless otherwise approved by the Board of Directors, including the Preferred Director, the Company shall retain a “right of first refusal” on employee transfers until the Company’s IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Qualified Small Business Stock. The Company shall use commercially reasonable efforts to cause the shares of Preferred Stock issued pursuant to the Series C Purchase Agreement, as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the United States Internal Revenue Code of 1986 (as amended, the “Code”), to constitute “qualified small business stock” as defined in Section 1202(c) of the Code; provided, however, that such requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor’s written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company’s possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code.

5.5 Matters Requiring Investor Director Approval. So long as the holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are entitled to elect a Preferred Director, the Company hereby covenants and agrees with the Investors holding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock that it shall not, nor shall it permit any subsidiary to, without approval of the Board of Directors, which approval must include the affirmative vote of the Preferred Director:

- (a) make any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company;
- (b) make any loan or advance to any Person, including, without limitation, any employee or director of the Company or any subsidiary, except advances and similar expenditures in the ordinary course of business or under the terms of an employee stock or option plan approved by the Board of Directors, including the Preferred Director;
- (c) guarantee, directly or indirectly, any indebtedness except for trade accounts of the Company or any subsidiary arising in the ordinary course of business;
- (d) make any investment inconsistent with any investment policy approved by the Board of Directors;
- (e) incur any aggregate indebtedness in excess of \$250,000 that is not already included in a budget approved by the Board of Directors, other than trade credit incurred in the ordinary course of business;
- (f) otherwise enter into or be a party to any transaction with any director, officer, or employee of the Company or any “associate” (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, except for transactions contemplated by this Agreement and the Purchase Agreement; transactions resulting in payments to or by the Company in an aggregate amount less than \$100,000 per year; or transactions made in the ordinary course of business and pursuant to reasonable requirements of the Company’s business and upon fair and reasonable terms that are approved by a majority of the Board of Directors;
- (g) hire, terminate, or change the compensation of the executive officers, including approving any option grants or stock awards to executive officers;
- (h) change the principal business of the Company, enter new lines of business, or exit the current line of business;
- (i) sell, assign, license, pledge, or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business;
- (j) increase the shares of Common Stock reserved for issuance under the Company’s 2012 Stock Incentive Plan or adopt any other equity incentive plan; or

(k) enter into any corporate strategic relationship involving the payment, contribution, or assignment by the Company or to the Company of money or assets greater than \$250,000.

5.6 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule, unless agreed by a majority of the Board of Directors, including the Preferred Director. The Company shall reimburse the nonemployee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors. The Company shall cause to be established, as soon as practicable after such request, and will maintain, an audit and compensation committee, each of which shall consist solely of non-management directors. Each non-employee director shall be entitled in such person's discretion to be a member of any Board committee. Each committee of the Board shall include the Preferred Director.

5.7 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, its Certificate of Incorporation, or elsewhere, as the case may be.

5.8 Termination of Covenants. The covenants set forth in this Section 5, except for Subsection 5.7, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 100,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such

Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein. Notwithstanding anything to the contrary in this Subsection 6.1, Comerica Ventures, and its successors and assigns, may transfer and assign its rights under the Agreement (together with all related obligations): (a) to any transferee irrespective of the minimum share requirement set forth in clause (iii) of this Subsection 6.1; and (b) to any of its Affiliates, partners or stockholders without compliance with the notice and delivery requirements set forth in clauses (x) and (y) in the proviso at the end of the first sentence of this Subsection 6.1 of the Agreement (but only to the extent such transferee remains bound by the restrictions and obligations of the transferor under the Agreement).

6.2 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts, without regard to conflict of law principles that would result in the application of any law other than the law of the Commonwealth of Massachusetts.

6.3 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company at 161 First Street, Suite 2C, Cambridge, MA 02142, Attention: Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5. If notice is given to the Company, a copy shall also be given to Latham & Watkins LLP, John Hancock Tower, 27th Floor, 200 Clarendon Street, Boston, MA 02116, Attention Peter N. Handrinos, Esq.

6.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c)) shall be deemed to be a waiver); provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction). The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto; provided, however, that no such amendment shall be binding on Nestlé or any of its Affiliates if such amendment (1) is not entered into or approved in writing by Nestlé or such Affiliate (provided that, for the avoidance of doubt, any such entry into or approval in writing that occurs through the exercise of any right or the enforcement of any obligation arising under Section 4 of the Common Stock Purchase Agreement shall not be deemed for any purpose to constitute an entry into or an approval in writing by Nestlé or such Affiliate for this purpose) and (2)(i) imposes an obligation on Nestlé or such Affiliate that is unrelated to (x) the subject matter of this Agreement or the Purchase Agreement, or the transactions contemplated hereby or thereby, (y) Nestlé's investment in the Company or (z) Nestlé's ownership of securities of the Company or (ii) imposes any restriction on the conduct by Nestlé or any of its Affiliates of its business. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Entire Agreement. This Agreement (including any Schedules hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.10 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the Commonwealth of Massachusetts and to the jurisdiction of the United States District Court for the District of Massachusetts for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of the Commonwealth of Massachusetts or the United States District Court for the District of Massachusetts, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.11 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.12 Further Assurances. At any time or from time to time after the date hereof, the parties agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as the other party may reasonably request in order to evidence or effectuate the consummation of the transactions contemplated hereby and to otherwise carry out the intent of the parties hereunder.

6.13 Acknowledgment. The Company acknowledges that each Investor is in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict any Investor from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

6.14 Massachusetts Business Trust. A copy of the Agreement and Declaration of Trust of each Investor affiliated with Fidelity Management & Research Company is on file with the Secretary of State of the Commonwealth of Massachusetts and notice is hereby given that this Agreement is executed on behalf of the trustees of such Investor or any affiliate thereof as trustees and not individually and that the obligations of this Agreement are not binding on any of the trustees, officers or stockholders of such Investor or any affiliate thereof individually but are binding only upon such Investor or any affiliate thereof and its assets and property.

6.15 Series D-1 Preferred Stock. For all purposes of this Agreement, all outstanding shares of Series D-1 Preferred Stock shall be deemed to have been converted into Series D Preferred Stock and each reference herein to "Preferred Stock" shall be deemed to refer to and include to such shares.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

SERES HEALTH, INC.

By: /s/ Roger J. Pomerantz

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

INVESTORS:

NESTLÉ HEALTH SCIENCE US HOLDINGS, INC.

By: /s/ Andrew Glass

Name: Andrew Glass

Title: Asst Sec

INVESTORS:

**FIDELITY SELECT PORTFOLIOS:
BIOTECHNOLOGY PORTFOLIO**

By: /s/ Joseph Zambello

Name: Joseph Zambello

Title: Deputy Treasurer

INVESTORS:

**FIDELITY ADVISOR SERIES VII: FIDELITY
ADVISOR BIOTECHNOLOGY FUND**

By: /s/ Joseph Zambello

Name: Joseph Zambello

Title: Deputy Treasurer

INVESTORS:

**FIDELITY GROWTH COMPANY COMMINGLED
POOL**

By: /s/ Kenneth B. Robins

Name: Kenneth B. Robins

Title: Treasurer

INVESTORS:

**FIDELITY MT. VERNON STREET TRUST: FIDELITY
SERIES GROWTH COMPANY FUND**

By: /s/ Joseph Zambello

Name: Joseph Zambello

Title: Deputy Treasurer

INVESTORS:

**FIDELITY MT. VERNON STREET TRUST: FIDELITY
GROWTH COMPANY FUND**

By: /s/ Joseph Zambello

Name: Joseph Zambello

Title: Deputy Treasurer

INVESTORS:

ROCK SPRINGS CAPITAL MASTER FUND LP

By: Rock Springs GP LLC

Its: General Partner

By: /s/ Graham McPhail

Name: Graham McPhail

Title: Managing Director
Rock Springs Capital
650 S. Exeter St., Suite 1070
Baltimore, MD 21202

INVESTORS:

BLACKROCK HEALTH SCIENCES TRUST

By: BlackRock Advisors, LLC

Its: Investment Adviser

By: /s/ Hongying Xie

Name: Hongying Erin Xie

Title: Managing Director

INVESTORS:

**BLACKROCK HEALTH SCIENCES OPPORTUNITIES
PORTFOLIO, A SERIES OF BLACKROCK FUNDS**

By: BlackRock Advisors, LLC

Its: Investment Adviser

By: /s/ Hongying Xie

Name: Hongying Erin Xie

Title: Managing Director

INVESTORS:

**BLACKROCK HEALTH SCIENCES MASTER UNIT
TRUST**

By: BlackRock Capital Management, Inc.

Its: Investment Adviser

By: /s/ Hongying Xie

Name: Hongying Erin Xie

Title: Managing Director

INVESTORS:

LEERINK HOLDINGS LLC

By: /s/ Timothy R. G. Gerhold

Name: Timothy R. G. Gerhold, General Counsel

Title: Authorized Person

INVESTORS:

LEERINK SWANN CO-INVESTMENT FUND, LLC

By: /s/ Joseph R. Gentile

Name: Joseph R. Gentile

Title: Manager

INVESTORS:

SOFINNOVA VENTURE PARTNERS IX, L.P.

By: Sofinnova Management IX, L.L.C.
its General Partner

By: /s/ Srinivas Akkaraju

Name: Srinivas Akkaraju

Title: Managing Member

INVESTORS:

T. Rowe Price Health Sciences Fund, Inc.
TD Mutual Funds – TD Health Sciences Fund
Valic Company I – Health Sciences Fund
T. Rowe Price Health Sciences Portfolio
John Hancock Variable Insurance Trust – Health Sciences
Trust
John Hancock Funds II – Health Sciences Fund,
Each fund, severally and not jointly

By: T. ROWE PRICE ASSOCIATES, INC.,
Investment Adviser or Subadviser

By: /s/ Adam Poussard

Name: Adam Poussard

Title: Vice President

INVESTORS:

RA CAPITAL HEALTHCARE FUND, LP

By: /s/ Peter Klochinsky

Name: Peter Kolchinsky

Title: Manager

INVESTORS:

ORBIMED PRIVATE INVESTMENTS V, LP

By: OrbiMed Capital GP V LLC, its General Partner

By: OrbiMed Advisors LLC, is Managing Member

By: _____

Name:

Title:

INVESTORS:

FLAGSHIP VENTURES FUND IV, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar Afeyan
Manager

FLAGSHIP VENTURES FUND IV-Rx, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar Afeyan
Manager

FLAGSHIP VENTURES FUND 2007, L.P.

By its General Partner
Flagship Ventures Fund 2007 General Partner LLC

By: /s/ Noubar Afeyan
Manager

FLAGSHIP VENTURELABS IV LLC

By: FLAGSHIP VENTURES FUND IV, L.P.
its Authorized Member

By: FLAGSHIP VENTURES FUND IV GENERAL
PARTNER LLC
its General Partner

By: /s/ Noubar Afeyan
Name: Noubar Afeyan
Title: Manager

INVESTORS:

ENSO VENTURES 2 LIMITED BY INTERLOCK
DIRECTOR LTD., DIRECTOR

AUTHORIZED SIGNATORY

AUTHORIZED SIGNATORY

INVESTORS:

MAYO CLINIC

By: /s/ Harry N. Hoffman, III

Name: Harry N. Hoffman, III

Title: Treasurer and Chief Investment Officer

INVESTORS:

ALEXANDRIA EQUITIES, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, INC., a
Maryland corporation, managing member

By: /s/ Dean A. Shigenaga

Name: Dean A. Shigenaga

Title: Executive Vice President
Chief Financial Officer

INVESTORS:

/s/ Roger J. Pomerantz

Roger J. Pomerantz, M.D.

INVESTORS:

FAVREAU 2008 TRUST, DTD 4-10-2008

By: _____

Name: Jon Favreau

Title: Trustee

By: _____

Name: Joya Favreau

Title: Trustee

INVESTORS:

/s/ John Aunins

John Aunins

INVESTORS:

/s/ David Cook

David Cook

INVESTORS:

/s/ Matthew Henn

Matthew Henn

SCHEDULE A

INVESTORS

Name and Address

Nestlé Health Science US Holdings, Inc.
900 Long Ridge Road, Building 2
Stamford, CT 06902
Attention: Andrew Glass, Esq.
Email: andrew.glass@us.nestle.com
F: (480) 379-5510

OrbiMed Private Investments V, LP
c/o OrbiMed Advisors LLC
Attention: Evan Sotiriou
601 Lexington Ave.
54th Floor
New York, NY 10022

With a copy (which shall not constitute notice) to:

Nestlé Health Science S.A.
Avenue Nestlé, 55
1800 Vevey
Switzerland
Attention: Claudio Kuoni, Esq.
Email: Claudio.Kuoni@nestle.com
F: 41.21.924.2875

Fidelity Select Portfolios: Biotechnology Portfolio
Brown Brothers Harriman & Co.
525 Washington Blvd
Jersey City NJ 07310
Attn: Michael Lerman 15th Floor
Corporate Actions
Email: michael.lerman@bbh.com
F: (617) 772-2418

Leerink Swann Co-Investment Fund, LLC
1 Federal Street
Boston, MA 02110
Attention: General Counsel
F: (646) 499-7130

Fidelity Advisor Series VII: Fidelity Advisor
Biotechnology Fund
State Street Bank & Trust
PO Box 5756
Boston, Massachusetts 02206
Attn: Bangle & Co fbo Fidelity Advisor Series VII:
Fidelity Advisor Biotechnology Fund
Email: SSBCORP ACTIONS@StateStreet.com
F: (617) 988-9110

Leerink Holdings LLC
1 Federal Street
Boston, MA 02110
Attention: General Counsel
F: (646) 499-7130

Fidelity Growth Company Commingled Pool
Brown Brothers Harriman & Co.
525 Washington Blvd
Jersey City NJ 07310
Attn: Michael Lerman 15th Floor
Corporate Actions
Email: michael.lerman@bbh.com
F: (617) 772-2418

T. Rowe Price Health Sciences Fund, Inc.
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund
State Street Bank & Trust
PO Box 5756
Boston, Massachusetts 02206
Attn: WAVELENGTH + CO Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund
Email: SSBCORPCTIONS@StateStreet.com
F: (617) 988-9110

Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund
Ball & Co
C/o Citibank N.A./Custody
IC&D Lock Box
P.O Box 7247-7057
Philadelphia, P.A 19170-7057
Account #: 206681
Email: fidelity.tpacd@citi.com
F: 813-604-1415

BlackRock Health Sciences Master Unit Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com, chian.jiang@blackrock.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

BlackRock Health Sciences Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com, chian.jiang@blackrock.com

VALIC Company I – Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

TD Mutual Funds – TD Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

T. Rowe Price Health Sciences Portfolio
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

John Hancock Variable Insurance Trust – Health Sciences Trust
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

BlackRock Health Sciences Master Unit Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health
& Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com,
chian.jiang@blackrock.com

John Hancock Funds II – Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

Sofinnova Venture Partners IX, L.P.
c/o Sofinnova Ventures, Inc.
Attention: Hooman Shahlavi
3000 Sand Hill Road, Bldg 4, Suite 250
Menlo Park, CA 94025

RA Capital Healthcare Fund, LP
c/o RA Capital Management, LLC,
Attention: Amanda Daniels
20 Park Plaza, Suite 1200
Boston, MA 02116
F: (617) 778-2510

Flagship Ventures Fund IV, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Rock Springs Capital Master Fund LP
Attention: Evans Apeadu
650 South Exeter Street, Suite 1070
Baltimore, MD 21202
Email: evans@rockspringscapital.com

Flagship Ventures Fund IV-Rx, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Roger J. Pomerantz, M.D.
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX

Flagship Ventures Fund 2007, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Favreau 2008 Trust, dtd 4-10-2008
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
F: (310) 858-3947

Flagship VentureLabs IV LLC
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

David Cook
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
F: (617) 945-0268

Enso Ventures 2 Limited
Suite C1
Hirzel Court
Hirzel Street
St Peter Port
Guernsey
Channel Islands
GY1 2NH F: +44 (0) 1481 755859

Matthew Henn
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
F: (617) 945-0268

Mayo Clinic
200 First Street SW
Rochester, MN 55905
F: (507) 538-7802

John Aunins
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
F: (617) 945-0268

Alexandria Equities, LLC
385 E. Colorado Blvd. Suite 299
Pasadena, CA 91101
F: (626) 578-0770

For purposes of Section 2.1(b), Section 2.2 through Section 2.12, and Section 6 only:

Comerica Ventures Incorporated
1717 Main St.
5th Floor, MC 6406
Dallas, TX 75201

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

WARRANT TO PURCHASE STOCK

Corporation:	SERES HEALTH, INC., a Delaware corporation
Number of Shares:	92,127 (subject to adjustment as provided below)
Class of Stock:	Series A-2 Preferred Stock, par value \$0.001 per share (subject to adjustment as provided below)
Warrant Price:	\$1.78 per share (subject to adjustment as provided below)
Issue Date:	September 9, 2013
Expiration Date:	September 9, 2023 (Subject to Section 5.1)

THIS WARRANT TO PURCHASE STOCK (THIS "WARRANT") CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, COMERICA BANK, a Texas banking association, or its assignee ("Holder"), is entitled to purchase the number of fully paid and nonassessable shares of the class of securities (the "Shares") of SERES HEALTH, INC., a Delaware corporation (the "Company") at the initial exercise price per Share (the "Warrant Price"), all as set forth above and as adjusted from time to time pursuant to the terms of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. This Warrant is issued in connection with that certain Loan and Security Agreement, dated as September 9, 2013, by and between COMERICA BANK ("Bank") and the Company, as amended, modified, supplemented or restated from time to time (the "Loan Agreement").

ARTICLE 1 EXERCISE

1.1 Method of Exercise. Holder may exercise this Warrant by a duly executed Notice of Exercise in substantially the form attached as Appendix I to the principal office of the Company (or such other appropriate location as Holder is so instructed by the Company). Holder shall also deliver to the Company a check, wire transfer (to an account designated by the Company) or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 [Intentionally Omitted.]

1.3 Delivery of Certificate and New Warrant. Within 30 days after Holder exercises this Warrant and the Company receives payment of the aggregate Warrant Price, the Company shall deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised and has not expired, a new warrant representing the Shares not so acquired.

1.4 Replacement of Warrants. In the case of loss, theft or destruction of this Warrant, upon delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company at its expense shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.5 Acquisition of the Company.

1.5.1 "Acquisition." For the purpose of this Warrant, "Acquisition" means (a) any sale, lease, license, or other disposition of all or substantially all of the assets (including intellectual property) of the Company by means of any transaction or series of related transactions, or (b) any reorganization, consolidation, acquisition, merger, sale of the voting securities of the Company or any other transaction or

series of related transactions where the holders of the Company's outstanding voting securities before the transaction or series of related transactions beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction or series of related transactions (other than as the result of a bona fide equity financing exclusively for capital raising purposes in which the Company sells and issues equity securities to venture capital investors and is the surviving and continuing entity in such transaction). For the sake of clarity, an Acquisition shall include the Parent Holding Company Acquisition, as that term is defined in the Loan Agreement.

1.5.2 Treatment of Warrant in the Event of an Acquisition. The Company shall give Holder written notice at least 20 days prior to the closing of any proposed Acquisition. The Company will use commercially reasonable efforts to cause (i) the acquirer of the Company, (ii) successor or surviving entity or (iii) parent entity in an Acquisition (the "Acquirer") to assume this Warrant as a part of the Acquisition. Notwithstanding the foregoing or anything else to the contrary herein, this Warrant shall be assumed by the Acquirer in any Parent Holding Company Acquisition.

(a) If the Acquirer assumes this Warrant, then this Warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing of the Acquisition. The Warrant Price shall be adjusted accordingly, and the Warrant Price and number and class of Shares shall continue to be subject to adjustment from time to time in accordance with the provisions hereof.

(b) If the Acquirer refuses to assume this Warrant in connection with the Acquisition, the Company shall give Holder an additional written notice at least ten (10) days prior to the closing of the Acquisition of such fact (the "Non-Assumption Notice"). In such event, notwithstanding any other provision of this Warrant to the contrary, Holder may immediately exercise this Warrant in the manner specified in this Warrant with such exercise effective immediately prior to closing of the Acquisition. If the Company has provided a Non-Assumption Notice and Holder elects not to exercise this Warrant, then this Warrant will terminate immediately prior to the later of (1) five (5) business days after Holder's receipt of the Non-Assumption Notice, and (2) the closing of the Acquisition. Notwithstanding any other provision of this Warrant to the contrary if the Acquirer refuses to assume this Warrant in connection with such Acquisition, other than in connection with an Excluded Acquisition (as defined below), then effective automatically as of the date that is ten (10) days prior to the closing of such Acquisition, Holder shall have the option to elect to put this Warrant to the Company for cash in an amount equal to (x) a per Share amount equal to the difference between the Acquisition consideration payable for one Share and the Warrant Price, times (y) the number of Shares for which this Warrant is then exercisable. Holder's exercise of the put right may be conditioned on the closing of the Acquisition. As used herein, an "Excluded Acquisition" means, an Acquisition where the consideration that the holders of the Shares are entitled to receive on account of the Shares consists entirely of cash and/or shares of common stock that are publicly traded and listed on a national exchange and where the shares, if any, receivable by Holder of this Warrant were Holder to exercise this Warrant in full immediately prior to the closing of such Acquisition may be publicly re-sold by Holder in their entirety within the three (3) months following such closing pursuant to Rule 144 or an effective registration statement under the Act.

ARTICLE 2 ADJUSTMENTS TO THE SHARES

2.1 Stock Dividends, Etc. If the Company declares or pays a dividend on the Shares payable in additional Shares or other securities, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred.

2.2 Reclassification, Exchange or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion

of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the Company's Certificate of Incorporation upon the closing of a registered public offering of the Company's common stock. The Company or its successor shall promptly issue to Holder a new warrant for such new securities or other property. The new warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price, the number of securities or property issuable upon exercise of the new warrant and expiration date. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Combinations, Etc. If the outstanding Shares are combined or consolidated, by reclassification, reverse split or otherwise, into a lesser number of Shares, the Warrant Price shall be proportionately increased and the Number of Shares issuable under this Warrant shall be proportionately decreased. If the outstanding Shares are subdivided, split or multiplied, by reclassification, a stock dividend resulting in the issuance of additional Shares or otherwise, into a greater number of Shares, the Warrant Price shall be proportionately decreased and the Number of Shares issuable under this Warrant shall be proportionately increased.

2.4 Adjustments for Diluting Issuances. In the event of the issuance by the Company, after the Issue Date of this Warrant, of securities at a price per share less than the Warrant Price that would trigger an anti-dilution adjustment with respect to the Shares in accordance with the Company's Certificate of Incorporation and that is not otherwise waived in accordance with the Company's Certificate of Incorporation (a "Diluting Issuance"), then the number of shares of common stock issuable upon conversion of the Shares issuable upon exercise of this Warrant shall be adjusted, if applicable, in accordance with those provisions of the Company's Restated Certificate of Incorporation, a copy of which is attached hereto as Exhibit B, which apply to Diluting Issuances as if the Shares issuable upon exercise of this Warrant were outstanding on the date of such Diluting Issuance. The provisions set forth for the Shares in the Company's Certificate of Incorporation relating to the above in effect as of the Issue Date may not be amended, modified or waived, without the prior written consent of Holder unless such amendment, modification or waiver affects the rights associated with the Shares in the same manner as such amendment, modification or waiver affects the rights associated with all other shares of the same series and class as the Shares granted to Holder. Under no circumstances shall the aggregate Warrant Price payable by Holder upon exercise of this Warrant increase as a result of any adjustment arising from a Diluting Issuance. For the avoidance of doubt, there shall be no duplicate antidilution adjustment pursuant to this Section 2.4 and the Company's Certificate of Incorporation.

2.5 No Impairment. The Company shall not, by amendment of its Certificate of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article 2 against impairment.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price and/or the Number of Shares, the Company at its expense shall promptly compute such adjustment, and furnish Holder with a certificate signed by its Chief Financial Officer setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

2.7 Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the Number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder an amount computed by multiplying the fractional interest by the fair market value, as determined by the Company's Board of Directors, of a full Share.

ARTICLE 3
REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to, and agrees with, Holder as follows:

3.1.1 The initial Warrant Price referenced on the first page of this Warrant is not greater than the lowest price per share at which the Company has sold Shares as of the Issue Date.

3.1.2 All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, and all securities, if any, issuable upon conversion of such Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein, under Section 2.12 of the Investors Rights Agreement (as defined below) or under applicable federal and state securities laws.

3.1.3 The Company's capitalization table delivered to Holder as of the Issue Date is true and complete as of the Issue Date.

3.1.4 As of the Issue Date, the Number of Shares specified on the first page of this Warrant represents at least one-half of one percent (0.5%) of the outstanding equity securities of the Company, calculated on a fully-diluted basis (assuming the conversion of all outstanding convertible securities and the exercise of all outstanding options and warrants).

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon its stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (c) to effect any reclassification or recapitalization of stock; or (d) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up, then, in connection with each such event, the Company shall give Holder (1) at least 10 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above; and (2) in the case of the matters referred to in (c) and (d) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of stock will be entitled to exchange their stock for securities or other property deliverable upon the occurrence of such event). Upon request, the Company shall provide Holder with such information reasonably necessary for Holder to evaluate its rights as a holder of this Warrant or Shares in the case of matters referred to (a), (b), (c) and (d) herein above.

3.3 Information Rights. So long as Holder holds this Warrant and/or any of the Shares, the Company shall deliver to Holder, upon Holder's reasonable request (a) promptly after mailing, copies of all communications, information and/or communiqués to the stockholders of the Company, (b) within one hundred eighty (180) days after the end of each fiscal year of the Company, the annual audited financial statements of the Company certified by independent public accountants of recognized standing and (c) within forty-five (45) days after the end of each of the first three quarters of each fiscal year, the Company's quarterly, unaudited financial statements; provided, however, the Company shall not be required to provide the foregoing so long as it has similar reporting obligations under a loan and security agreement with Comerica Bank or following its initial public offering of equity securities pursuant to an effective registration statement under the Act. In addition, and without limiting the generality of the foregoing, so long as Holder holds this Warrant and/or any of the Shares, the Company shall afford to Holder the same access to information concerning the Company and its business and financial condition as would be afforded to a holder of the class of Shares under applicable state law and/or any agreement with any holder of the class of Shares.

3.4 Registration Under the Act. The Company shall execute, and cause the requisite stockholders of the Company to execute, an amendment and joinder in the form attached hereto as Exhibit A (the "Amendment to IRA") to that certain Amended and Restated Investors' Rights Agreement by and among the Company and its investors dated as of November 27, 2012, as amended from time to time (the "Investors' Rights Agreement"), a

copy of which is attached hereto as Exhibit C, and upon execution of the Amendment to IRA, the common stock of the Company issuable upon conversion of the Shares issuable upon exercise of this Warrant, shall be deemed “Registrable Securities” and otherwise entitled to “piggy back” and “S-3” registration rights in accordance with the terms of the Investors’ Rights Agreement, as amended by the IRA Amendment. The Company agrees that no amendments, waivers or modifications will be made to the Investors’ Rights Agreement which would have an adverse impact on Holder’s registration rights under this provision unless such amendment, waiver or modification affects the rights associated with the Shares in the same manner as such amendment, modification, or waiver affects the rights associated with all other shares of the same series and class as the Shares granted to Holder.

ARTICLE 4
INVESTMENT REPRESENTATIONS AND COVENANTS

With respect to the acquisition of this Warrant and any of the Shares issuable upon exercise of this Warrant, Holder hereby represents and warrants to, and agrees with, the Company as follows:

4.1 Purchase Entirely for Own Account. This Warrant is issued to Holder in reliance upon Holder’s representation to the Company that this Warrant and the Shares issuable upon exercise of this Warrant (and the shares of common stock issuable upon conversion of such Shares) will be acquired for investment for Holder’s, or its affiliate’s, own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof other than to an affiliate, and that Holder has no present intention of selling, granting any participation in, or otherwise distributing the same other than to an affiliate. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person, other than an affiliate, to sell, transfer or grant participations to such person or to any third person with respect to this Warrant, the Shares issuable upon exercise of this Warrant or any shares of common stock issuable upon conversion of such Shares.

4.2 Reliance upon Holder’s Representations. Holder understands that this Warrant and the Shares issuable upon exercise of this Warrant are not registered under the Act on the ground that the issuance of such securities is exempt from registration under the Act, and that the Company’s reliance on such exemption is predicated on Holder’s representations set forth herein.

4.3 Accredited Investor Status. Holder represents to the Company that Holder is an Accredited Investor (as defined in the Act).

4.4 Restricted Securities. Holder understands that this Warrant and the Shares issuable upon exercise of this Warrant are “restricted securities” under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such securities may be resold without registration under the Act only in certain limited circumstances.

ARTICLE 5
MISCELLANEOUS

5.1 Term; Exercise Upon Expiration. This Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above; *provided, however*, that if the Company completes its initial public offering within the two-year period immediately prior to the Expiration Date, the Expiration Date shall automatically be extended until the earlier of: (a) the second anniversary of the effective date of the Company’s initial public offering, and (b) [August], 2025. The Company agrees that Holder may terminate this Warrant, upon notice to the Company, at any time in its sole discretion.

5.2 Legends. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of such Shares, if any) shall be imprinted with a legend in substantially the following form:

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE

“ACT”), OR ANY APPLICABLE STATE SECURITIES LAWS, AND, EXCEPT PURSUANT TO THE PROVISIONS OF ARTICLE 5 BELOW, MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR PURSUANT TO RULE 144 OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of such Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee. The Company shall not require Bank or a Bank Affiliate (as defined herein) to provide an opinion of counsel or investment representation letter if the transfer is to Bank’s parent company, Comerica Incorporated (“Comerica”), or any other affiliate of Bank (“Bank Affiliate”).

5.4 Transfer Procedure. After receipt of the executed Warrant, Bank will transfer all of this Warrant to Comerica Ventures Incorporated, a non-banking subsidiary of Comerica and a Bank Affiliate (“Ventures”). Subject to the provisions of Section 5.3, Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of such Shares, if any) by giving the Company notice of the portion of this Warrant being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this Warrant to the Company for reissuance to the transferee(s) (and Holder, if applicable); provided, however, that Holder may transfer all or part of this Warrant to its affiliates, including, without limitation, Ventures, at any time without notice or the delivery of any other instrument to the Company, and such affiliate shall then be entitled to all the rights and subject to the obligations of Holder under this Warrant and any related agreements, and the Company shall cooperate fully in ensuring that any stock issued upon exercise of this Warrant is issued in the name of the affiliate that exercises this Warrant. The terms and conditions of this Warrant shall inure to the benefit of, and be binding upon, the Company and Holders hereof and their respective permitted successors and assigns. In addition, for the sake of clarity, pursuant to the Amendment to IRA, Ventures has agreed to be subject to the requirements of Section 2.12 of the Investors’ Rights Agreement.

5.5 Notices. All notices and other communications from the Company to Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, or sent via a nationally recognized overnight courier service, fee prepaid, or on the first business day after transmission by facsimile, at such address or facsimile number as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. Effective upon the receipt of executed Warrant and initial transfer described in Section 5.4 above, all notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

Comerica Ventures Incorporated
Attn: Warrant Administrator
1717 Main Street, 5th Floor, MC 6406
Dallas, Texas 75201
Facsimile No.: (214) 462-4459

All notices to the Company shall be addressed as follows:

SERES HEALTH, INC.
161 First Street
Cambridge, MA 02142
Facsimile No.: (617) 868-1115

5.6 Amendments; Waiver. This Warrant and any term hereof may be amended, changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such amendment, change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.9 Confidentiality. The Company hereby agrees to keep the terms and conditions of this Warrant confidential provided that the Company may provide copies of this Warrant in connection with third party due diligence in equity financing and acquisition transactions provided that the recipient thereof agrees to keep the terms hereof confidential. Notwithstanding the foregoing confidentiality obligation, the Company may disclose information relating to this Warrant in a registration statement filed with the Securities and Exchange Commission or as required by law, rule, regulation, court order or other legal authority, provided that (i) the Company has given Holder at least ten (10) days' notice of such required disclosure, and (ii) the Company only discloses information that is required, in the opinion of counsel reasonably satisfactory to Holder, to be disclosed.

5.10 Counterparts. This Warrant may be executed in counterparts, all of which taken together shall constitute one and the same instrument.

[Remainder of Page Left Blank]

IN WITNESS WHEREOF, each of the parties have caused this Warrant to be duly executed by its duly authorized officers as of the first date written above.

SERES HEALTH, INC.

By: /s/ David Berry

Name: David Berry

Title: President

COMERICA BANK

By: /s/ Jason Pan

Name: Jason Pan

Title: Vice President

NOTICE OF EXERCISE

1. The undersigned hereby elects to purchase _____ shares of the _____ stock of **SERES HEALTH, INC.** pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price of such shares in full.

2. Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below:

Comerica Ventures Incorporated
Attn: Warrant Administrator
1717 Main Street, 5th Floor, MC 6406
Dallas, Texas 75201
Facsimile No. (214) 462-4459

3. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws, and confirms the representations and warranties set forth in Article 4 of the attached Warrant.

COMERICA VENTURES INCORPORATED or Assignee

(Signature)

(Name and Title)

(Date)

Exhibit A

Form of Amendment to IRA

Exhibit A
Page 1

Exhibit B

Anti-Dilution Provisions

Amended and Restated Certificate of Incorporation (including all amendments thereto) – ATTACHED HERETO

Exhibit B

Page 1

Exhibit C

Registration Rights

Amended and Restated Investors' Rights Agreement (including all amendments thereto) – ATTACHED HERETO

Exhibit C

Page 1

THIS WARRANT AND THE SECURITIES ISSUABLE UPON ITS EXERCISE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISPOSITION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933. THIS WARRANT AND THE SECURITIES ISSUABLE UPON ITS EXERCISE ARE SUBJECT TO THE RESTRICTIONS ON TRANSFER SET FORTH IN SECTION 7 OF THIS WARRANT.

Date of Issuance: June 6, 2014

Number of Shares:

As set forth in subsection 1.2(c) below

Deemed Original Issue Date: June 6, 2014

Seres Health, Inc.

Common Stock Purchase Warrant

Seres Health, Inc., a Delaware corporation (the “Company”), for value received, hereby certifies that Mayo Foundation for Medical Education and Research, a Minnesota charitable corporation (“Mayo”) (the “Registered Holder”), is entitled, subject to the terms and conditions set forth below, to purchase from the Company, at any time or from time to time on or after the Date of Issuance and on or before 11:59 p.m. (Cambridge, Massachusetts time) on the day prior to the Expiration Date (as defined below), the number of Warrant Shares determined in accordance with subsection 1.2(c) below at the applicable Purchase Price, as determined in accordance with subsection 1.2(b) below.

1. Research Agreement; Definitions.

- 1.1 This Common Stock Purchase Warrant (this “Warrant”) is issued pursuant to that certain Research and Option Agreement, effective as of June 6, 2014, between the Company and Mayo (the “Research Agreement”). Mayo agrees and acknowledges that the issuance of this Warrant to Mayo satisfies and fulfills in their entirety the obligations of the Company pursuant to Section 3.02(a) of the Research Agreement.
- 1.2 Capitalized terms used herein without definition shall have the meaning provided in the Research Agreement. Unless defined in the Research Agreement or elsewhere in this Warrant, the following terms shall have the following meanings:
- (a) “Change of Control” shall mean a “Deemed Liquidation Event” as defined in the Company’s Certificate of Incorporation, as may be amended and/or restated from time to time after the date hereof.
- (b) “Purchase Price” shall mean, at the time of any determination of the Purchase Price in accordance with the terms hereof, the per share price at which the Company most recently sold shares of its preferred stock, \$0.001 per share, to institutional investors in a bona fide financing transaction, but in no event less

than \$2.20 (as may be adjusted from time to time in accordance with the terms of Section 4 hereof); provided, however, that if, at the time of any determination of the Purchase Price in accordance with the terms hereof, the Common Stock is traded on a national securities exchange, including without limitation The Nasdaq Stock Market, the Purchase Price shall equal the closing price of the Common Stock as published in The Wall Street Journal on the trading day immediately prior to the date of such determination.

(c) “Warrant Shares” shall mean such whole number (with any fraction rounded down) of fully paid and nonassessable shares of Common Stock, \$0.001 par value per share, of the Company (“Common Stock”) as is equal to the quotient of (a) the payments made by the Company to Mayo pursuant to Section 3.02(b) of the Research Agreement for each Indication approved pursuant to Section 3.03 of the Research Agreement that is Therapeutically Distinct (each of which payment shall not exceed \$125,000 in the aggregate) divided by (b) the then-applicable Purchase Price; provided, however, that the maximum number of Indications approved by the Company in connection with this Warrant shall be five (5), and the number of Warrant Shares issued or issuable upon exercise or conversion of this Warrant shall at no point exceed, in the aggregate, 284,090 shares of Common Stock (as may be adjusted from time to time in accordance with the terms of Section 4 hereof, which represents the maximum number of shares for five (5) Indications approved by the Company); provided, further, that in the event that the Company approves greater than five (5) Indications pursuant to the terms of the Research Agreement, the Company shall issue to MAYO an additional warrant with substantially similar terms as this Warrant in connection with MAYO’s achievement of the Milestones for such additional Indications approved by the Company. The number of Warrant Shares issuable from time to time under this Warrant shall be determined in good faith by the Company’s Board of Directors (the “Board”) at the first meeting of the Board following notification from Mayo under the Research Agreement indicating its good faith belief that an applicable Milestone has been achieved.

2. Termination of Warrant. Notwithstanding anything to the contrary herein, to the extent not previously exercised, converted or terminated, this Warrant and all of the Registered Holder’s rights hereunder shall immediately terminate in their entirety, and thereafter this Warrant shall not be or become exercisable in any respect, upon the earliest to occur of:

- (a) The seventh (7th) anniversary of the Deemed Original Issue Date of this Warrant;
- (b) The termination of the Research Agreement by Mayo (or a successor or assignee of Mayo under such agreement) prior to the date that is two (2) years after the Deemed Original Issue Date;
- (c) Any material breach of the Research Agreement or the terms of this Warrant by the Registered Holder (including by its officers, directors, employees, members, managers, partners, agents, or representatives);

- (d) The closing of the Initial Public Offering (as defined below);
- (e) The consummation of any Change of Control; and
- (f) The voluntary or involuntary dissolution, liquidation or winding-up of the Company.

The date on which this Warrant expires or terminates pursuant to this Section 2 is referred to herein as the “Expiration Date”.

3. Exercise.

3.1 Exercise for Cash. The Registered Holder may, at its option, elect to exercise the then exercisable portion of this Warrant, in whole or in part and at any time or from time to time, by surrendering this Warrant, with the Notice of Exercise appended hereto as Exhibit I duly executed by or on behalf of the Registered Holder, at the principal office of the Company, or at such other office or agency as the Company may designate, accompanied by (i) payment in full, in lawful money of the United States, of the Purchase Price payable in respect of the number of vested Warrant Shares purchased upon such exercise or (ii) an executed counterpart to all agreements among the Company and its stockholders that the Company reasonably requests the Registered Holder to enter into in connection with such exercise of this Warrant.

3.2 Net Exercise. In lieu of any exercise pursuant to subsection 3.1 hereof, the Registered Holder may elect to convert this Warrant or any portion thereof (the “Conversion Right”), by surrender of this Warrant at the principal office of the Company together with notice of the Registered Holder’s intention to exercise the Conversion Right, into that number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where:

X = The number of Warrant Shares to be issued to the Holder upon exercise of the Conversion Right.

Y = The number of Warrant Shares for which this Warrant is being exercised.

A = The Fair Market Value (as defined below) of one Warrant Share at the time the Conversion Right is exercised.

B = Purchase Price (as adjusted to the date of such calculation).

For purposes of subsection 3.2, “Fair Market Value” shall mean:

(a) If the Warrant is exercised in connection with and contingent upon the Initial Public Offering, and if the Company’s registration statement relating to such

Initial Public Offering has been declared effective by the Securities and Exchange Commission, then the initial "Price to Public" specified in the final prospectus with respect to such offering.

(b) If the Warrant is exercised in connection with and contingent upon a "Deemed Liquidation Event" as defined in the Company's Certificate of Incorporation, as may be amended and/or restated from time to time after the date hereof, then the purchase price per share of Common Stock, as determined in good faith by the Board of Directors of the Company.

If neither of (a) or (b) is applicable, then the fair market value as determined in good faith by the Board of Directors of the Company.

- 3.3 Exercise Date. Each exercise of this Warrant shall be deemed to have been effected immediately prior to the close of business on the day on which this Warrant shall have been surrendered to the Company as provided in subsection 3.1 above together with the items described in clauses (i) and (ii) thereof or the applicable date of conversion as provided in subsection 3.2 above (any such day, the "Exercise Date"). At such time, the person or persons in whose name or names any certificates for Warrant Shares shall be issuable upon such exercise as provided in subsection 3.4 below shall be deemed to have become the holder or holders of record of the Warrant Shares represented by such certificates.
- 3.4 Issuance of Certificates. Upon receipt by the Company of this Warrant and such Notice of Exercise, together with the aggregate Purchase Price for the Warrant Shares being purchased, at its principal office, or by the stock transfer agent or warrant agent of the Company at its office, the Registered Holder shall be deemed to be the holder of record of the applicable Warrant Shares, notwithstanding that the stock transfer books of the Company shall then be closed or that certificates representing such Warrant Shares shall not then be actually delivered to the Registered Holder. The Company shall, as soon as practicable after the exercise of this Warrant in accordance with the terms hereof, prepare a certificate for the Warrant Shares purchased in the name of the Registered Holder. If this Warrant should be exercised in part only, the Company shall, as soon as practicable after the surrender of this Warrant, execute and deliver a new Warrant evidencing the rights of the Registered Holder thereof to purchase the balance of the Warrant Shares purchasable hereunder.
- 3.5 Automatic Exercise. To the extent this Warrant is not previously exercised, it shall be deemed to have been automatically converted in accordance with subsection 3.2 hereof (even if not surrendered) as of immediately before its expiration, involuntary termination or cancellation if the Fair Market Value of a Warrant Share exceeds the Purchase Price at such time, unless the Registered Holder notifies the Company in writing to the contrary at least three days prior to such automatic exercise.
4. Adjustments.

- 4.1 Adjustment for Stock Splits and Combinations. If the Company shall at any time or from time to time prior to the Expiration Date effect a subdivision of the outstanding Common Stock, the Purchase Price then in effect immediately before such subdivision shall be proportionately decreased. If the Company shall at any time or from time to time prior to the Expiration Date combine the outstanding shares of Common Stock, the Purchase Price then in effect immediately before such combination shall be proportionately increased. Any adjustment under this paragraph shall become effective at the close of business on the date the applicable subdivision or combination becomes effective.
- 4.2 Adjustment for Certain Dividends and Distributions. In the event the Company at any time or from time to time prior to the Expiration Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in additional shares of Common Stock, then and in each such event the Purchase Price then in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Purchase Price then in effect by a fraction:
- (a) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, as applicable, and
 - (b) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution, as applicable;
- provided, however, that if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Purchase Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Purchase Price shall be adjusted pursuant to this subsection 4.2 as of the time of actual payment of such dividends or distributions.
- 4.3 Adjustment in Number of Warrant Shares. When any adjustment is required to be made in the Purchase Price pursuant to subsections 4.1 or 4.2, the number of Warrant Shares purchasable upon the exercise of this Warrant shall be changed to the number determined by dividing (i) an amount equal to the number of shares issuable upon the exercise of this Warrant immediately prior to such adjustment, multiplied by the Purchase Price in effect immediately prior to such adjustment, by (ii) the Purchase Price in effect immediately after such adjustment.
- 4.4 Adjustment for Reorganization. If there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Company in which the Common Stock is converted into or exchanged for securities, cash or other property (other than a transaction covered by subsections 4.1 or 4.2) collectively, a “Reorganization”), then, subject to Section 2, following such Reorganization, the Registered Holder shall receive upon exercise hereof the kind and amount of securities, cash or other property which the

Registered Holder would have been entitled to receive pursuant to such Reorganization if such exercise had taken place immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board shall be made in the application of the provisions set forth herein with respect to the rights and interests thereafter of the Registered Holder, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Purchase Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities, cash or other property thereafter deliverable upon the exercise of this Warrant.

- 4.5 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Purchase Price pursuant to subsections 4.1, 4.2, 4.3 or 4.4, the Company shall compute such adjustment or readjustment in accordance with the terms hereof and furnish to the Registered Holder a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property for which this Warrant shall be exercisable and the Purchase Price). The Company shall, upon the reasonable written request at any time of the Registered Holder, furnish or cause to be furnished to the Registered Holder a certificate setting forth (i) the Purchase Price then in effect and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the exercise of this Warrant.
5. Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise hereunder, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Purchase Price then in effect.
6. Investment Representations. The initial Registered Holder represents and warrants to the Company as follows:
 - 6.1 Investment. It is acquiring the Warrant, and (if and when it exercises this Warrant) it will acquire the Warrant Shares, for its own account for investment and not with a view to, or for sale in connection with, any distribution thereof, nor with any present intention of distributing or selling the same; and the Registered Holder has no present or contemplated agreement, undertaking, arrangement, obligation, indebtedness or commitment providing for the disposition thereof.
 - 6.2 Accredited Investor and Bad Actor. The Registered Holder is an “accredited investor” as defined in Rule 501(a) under the Securities Act of 1933, as amended (the “Act”). None of the “Bad Actor” disqualifying events described in Rule 506(d)(1)(i) to (viii) promulgated under the Act (a “Disqualification Event”) is applicable to the Registered Holder or any of its Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. For purposes of this Warrant, “Rule 506(d) Related Party” shall mean a person that is a beneficial owner of the Registered Holder’s securities for purposes of Rule 506(d) of the Act.
 - 6.3 Experience. The Registered Holder has made such inquiry concerning the Company and its business and personnel as it has deemed appropriate, has had an opportunity to discuss

the Company and its business with the Company's officers and directors, and has received all information requested or required by the Registered Holder in connection with its investment in the Company and the purchase of this Warrant. The Registered Holder has sufficient knowledge and experience in finance and business that it is capable of evaluating the risks and merits of its investment in the Company.

7. Transfers, etc.

- 7.1 Transfer. In no event shall the Registered Holder sell, assign, transfer, pledge, hypothecate, or otherwise dispose of, by operation of law or otherwise (collectively, "transfer"), in whole or in part, this Warrant, any of the Warrant Shares issued or issuable upon exercise of this Warrant, or any right hereunder, without the prior written consent of the Company; provided, however, that if (i) the prospective transferee is an "accredited investor" as defined in Rule 501(a) under the Act, (ii) the transfer complies with applicable securities laws and (iii) the transfer would not increase the Company's obligations to its stockholders under applicable securities laws, the consent of the Company shall not be unreasonably withheld for transfers of this Warrant, any of the Warrant Shares issuable upon exercise of the Warrant, or any right hereunder from Mayo to its employees. Upon the written consent of the Company, this Warrant may be transferred upon surrender of this Warrant with a properly executed assignment (in the form of Exhibit II hereto) at the principal office of the Company (or, if another office or agency has been designated by the Company for such purpose, then at such other office or agency).
- 7.2 Restricted Securities. In addition to any restrictions set forth in subsection 7.1 above or elsewhere herein, this Warrant and the Warrant Shares shall not be transferred unless either (i) they first shall have been registered under the Act, or (ii) the Company first shall have been furnished with an opinion of legal counsel satisfactory to the Company to the effect that such sale or transfer is exempt from the registration requirements of the Act. Notwithstanding the foregoing, no registration or opinion of counsel shall be required for a transfer made in accordance with Rule 144 under the Act.
- 7.3 Transferees Bound. Notwithstanding the foregoing or anything to the contrary herein, the Registered Holder agrees that it will not transfer this Warrant or any rights hereunder unless the transferee, as a condition to such transfer, delivers to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions hereof; provided that such a written confirmation shall not be required with respect to Section 10 after the completion of the lock-up period in connection with the Company's Initial Public Offering.
- 7.4 No Obligation to Recognize Invalid Transfer. The Company shall not be required (i) to transfer on its books this Warrant or any of the Warrant Shares which shall have been sold or transferred in violation of any of the provisions hereof or of any agreement to which the Registered Holder is bound, or (ii) to treat as owner of this Warrant or such Warrant Shares, or to pay dividends to any transferee to whom any such Warrant Shares shall have been so sold or transferred.

- 7.5 Warrant Register. The Company will maintain a register containing the name and address of the Registered Holder of this Warrant. The Registered Holder may change its address as shown on the warrant register by written notice to the Company requesting such change.
- 7.6 Legends. Each certificate representing Warrant Shares shall bear legends (in addition to, or in combination with, any other legend required by this Warrant or any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities) substantially in the following forms:
- “The securities represented by this certificate have not been registered under the Securities Act of 1933, as amended, and may not be offered, sold or otherwise transferred, pledged or hypothecated unless and until such securities are registered under such Act or an opinion of counsel satisfactory to the Company is obtained to the effect that such registration is not required.”
- “The securities represented by this certificate are subject to certain restrictions on transfer, as provided in a certain Common Stock Purchase Warrant with the Company.”
8. Reservation of Stock. The Company will at all times reserve and keep available, solely for issuance and delivery upon the exercise of this Warrant, such number of Warrant Shares, as from time to time shall be issuable upon the exercise of this Warrant.
9. Exchange or Replacement of Warrants.
- 9.1 Upon the surrender by the Registered Holder, properly endorsed, to the Company at the principal office of the Company, the Company will, subject to the provisions of Section 7 hereof, issue and deliver to or upon the order of the Registered Holder, at the Company’s expense, a new Warrant or Warrants of like tenor, in the name of the Registered Holder or as the Registered Holder (upon payment by the Registered Holder of any applicable transfer taxes) may direct, calling in the aggregate on the face or faces thereof for the number of shares of Warrant Shares.
- 9.2 Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and (in the case of loss, theft or destruction) upon delivery of an indemnity agreement (with surety if reasonably required) in an amount reasonably satisfactory to the Company, or (in the case of mutilation) upon surrender and cancellation of this Warrant, the Company will issue, in lieu thereof, a new Warrant of like tenor.
10. Agreement in Connection with Public Offering. The Registered Holder agrees, in connection with the initial underwritten public offering of the Company’s securities pursuant to a registration statement under the Act (the “Initial Public Offering”), (i) not to sell, make short sale of, loan, grant any options for the purchase of, or otherwise dispose of any shares of Common Stock held by the Registered Holder (other than any shares included in the offering) without the prior written consent of the Company or the

underwriters managing such initial underwritten public offering of the Company's securities for a period of 180 days following the date of the final prospectus relating to the Initial Public Offering (or such other period as may reasonably be requested by the Company or the managing underwriter), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering.

11. Notices. All notices and other communications from the Company to the Registered Holder in connection herewith shall be mailed by certified or registered mail, postage prepaid, or sent via a reputable nationwide overnight courier service guaranteeing next business day delivery, to the address set forth on the signature page hereto, or such address as may be provided to the Company in writing by the Registered Holder from time to time pursuant to this Section 11. All notices and other communications from the Registered Holder to the Company in connection herewith shall be mailed by certified or registered mail, postage prepaid, or sent via a reputable nationwide overnight courier service guaranteeing next business day delivery, to the Company at its principal office set forth below. If the Company should at any time change the location of its principal office to a place other than as set forth below, thereafter all references in this Warrant to the location of its principal office at the particular time shall be deemed to refer to the Company's then-current principal office. All such notices and communications shall be deemed delivered (i) two business days after being sent by certified or registered mail, return receipt requested, postage prepaid, or (ii) one business day after being sent via a reputable nationwide overnight courier service guaranteeing next business day delivery.
12. No Rights as Stockholder. No Registered Holder of this Warrant shall be entitled to vote or receive dividends or be deemed the holder of capital stock or any other equity securities of the Company, nor shall anything contained herein be construed to confer upon the Registered Holder of this Warrant, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance, or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or otherwise until this Warrant has been exercised and the Warrant Shares shall have become deliverable, as provided herein.
13. Amendment or Waiver. Any term of this Warrant may be amended or waived only by an instrument in writing signed by the party against which enforcement of the change or waiver is sought. No waivers of any term, condition or provision of this Warrant, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.
14. Section Headings. The section headings in this Warrant are for the convenience of the parties and in no way alter, modify, amend, limit or restrict the contractual obligations of the parties.

15. Governing Law. This Warrant will be governed by and construed in accordance with the internal laws of the State of Delaware (without reference to the conflicts of law provisions thereof that would result in the application of the laws of any other jurisdiction).
16. Facsimile Signatures. This Warrant may be executed by facsimile or electronic signature transmission (including by pdf).

[—Signature page follows—]

EXECUTED as of the Date of Issuance indicated above.

SERES HEALTH, INC.

By: /s/ Roger Pomerantz

Name: Roger Pomerantz

Title: President and Chief Executive Officer

ATTEST:

MAYO CLINIC

By: /s/ James A. Rogers III

Name: James A. Rogers III

Title: Chair, Mayo Clinic Ventures

Address:

200 First Street SW
Rochester, MN 55905

NOTICE OF EXERCISE

To: _____

Dated: _____

The undersigned, pursuant to the provisions set forth in the attached Warrant, hereby elects to purchase _____ shares of the Common Stock of Seres Health, Inc. covered by such Warrant.

The undersigned herewith makes payment of the full purchase price for such shares at the price per share provided for in such Warrant. Such payment takes the form of \$_____ in lawful money of the United States.

By its execution below and for the benefit of the Company, the undersigned hereby restates each of the Investment Representations in Section 6 of the Warrant as of the date hereof.

Signature: _____

Address: _____

NOTICE OF EXERCISE

ASSIGNMENT FORM

FOR VALUE RECEIVED, _____ hereby sells, assigns and transfers all of the rights of the undersigned under the attached Warrant with respect to the number of shares of Common Stock of Seres Health, Inc. covered thereby set forth below, unto:

Name of Assignee

Address

No. of Shares

Dated: _____

Signature: _____

ASSIGNMENT FORM

SERES HEALTH, INC.

2012 STOCK INCENTIVE PLAN1. Purpose

The purpose of this 2012 Stock Incentive Plan (the “**Plan**”) of Seres Health, Inc., a Delaware corporation (the “**Company**”), is to advance the interests of the Company’s stockholders by enhancing the Company’s ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align the interests of such persons with those of the Company’s stockholders. Except where the context otherwise requires, the term “**Company**” shall include any of the Company’s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations thereunder (the “**Code**”) and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the “**Board**”); *provided, however*, that such other business ventures shall be limited to entities that, where required by Section 409A of the Code, are eligible issuers of service recipient stock (as defined in Treas. Reg. Section 1.409A-1(b)(5)(iii)(E), or applicable successor regulation).

2. Eligibility

All of the Company’s employees, officers and directors, as well as consultants and advisors to the Company (as such terms are defined and interpreted for purposes of Rule 701 under the Securities Act of 1933, as amended (the “**Securities Act**”) (or any successor rule)) are eligible to be granted Awards under the Plan. Each person who is granted an Award under the Plan is deemed a “**Participant**.” “**Award**” means Options (as defined in Section 5), SARs (as defined in Section 6), Restricted Stock (as defined in Section 7), Restricted Stock Units (as defined in Section 7) and Other Stock-Based Awards (as defined in Section 8).

3. Administration and Delegation

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board’s sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award.

(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a “**Committee**”). All references in the Plan to the “**Board**” shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board’s powers or authority under the Plan have been delegated to such Committee or officers.

(c) **Delegation to Officers.** To the extent permitted by applicable law, the Board may delegate to one or more officers of the Company the power to grant Options and other Awards that constitute rights under Delaware law (subject to any limitations under the Plan) to employees or officers of the Company and to exercise such other powers under the Plan as the Board may determine, *provided* that the Board shall fix the terms of such Awards to be granted by such officers (including the exercise price of such Awards, which may include a formula by which the exercise price will be determined) and the maximum number of shares subject to such Awards that the officers may grant; *provided* further, however, that no officer shall be authorized to grant such Awards to any “executive officer” of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”)) or to any “officer” of the Company (as defined by Rule 16a-1 under the Exchange Act). The Board may not delegate authority under this Section 3(c) to grant Restricted Stock, unless Delaware law then permits such delegation.

4. Stock Available for Awards

(a) **Number of Shares.** Subject to adjustment under Section 9, Awards may be made under the Plan for up to 1,000,000 shares of common stock, \$0.001 par value per share, of the Company (the “**Common Stock**”), any or all of which Awards may be in the form of Incentive Stock Options (as defined in Section 5(b)). If any Award expires or is terminated, surrendered or canceled without having been fully exercised, is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right), or results in any Common Stock not being issued, the unused Common Stock covered by such Award shall again be available for the grant of Awards under the Plan. Further, shares of Common Stock tendered to the Company by a Participant to exercise an Award shall be added to the number of shares of Common Stock available for the grant of Awards under the Plan. However, in the case of Incentive Stock Options, the two immediately preceding sentences shall be subject to any limitations under the Code. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(b) **Substitute Awards.** In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Awards in substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof. Substitute Awards may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Awards contained in the Plan. Substitute Awards shall not count against the overall share limit set forth in Section 4(a), except as may be required by reason of Section 422 and related provisions of the Code.

5. Stock Options

(a) **General.** The Board may grant options to purchase Common Stock (each, an “**Option**”) and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable.

(b) **Incentive Stock Options.** An Option that the Board intends to be an “incentive stock option” as defined in Section 422 of the Code (an “**Incentive Stock Option**”) shall only be granted to employees of Seres Health, Inc., any of Seres Health, Inc.’s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Code, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code, and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. An Option that is not intended to be an Incentive Stock Option shall be designated a “**Nonstatutory Stock Option.**” The Company shall have no liability to a Participant, or any other party, if an Option (or any part thereof) that is intended to be an Incentive Stock Option is not an Incentive Stock Option or if the Company converts an Incentive Stock Option to a Nonstatutory Stock Option.

(c) **Exercise Price.** The Board shall establish the exercise price of each Option and specify the exercise price in the applicable Option agreement. The exercise price shall be not less than 100% of the fair market value per share of Common Stock, as determined by (or in a manner approved by) the Board (“**Fair Market Value**”), on the date the Option is granted.

(d) **Duration of Options.** Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement; *provided, however*, that no Option will be granted with a term in excess of 10 years.

(e) **Exercise of Options.** Options may be exercised by delivery to the Company of a notice of exercise in a form of notice (which may be electronic) approved by the Company, together with payment in full (in a manner specified in Section 5(f)) of the exercise price for the number of shares for which the Option is exercised. Shares of Common Stock subject to the Option will be delivered by the Company as soon as practicable following exercise.

(f) **Payment Upon Exercise.** Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

(1) in cash or by check, payable to the order of the Company;

(2) when the Common Stock is registered under the Exchange Act, except as may otherwise be provided in the applicable Option agreement or approved by the Board, in its sole discretion, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;

(3) when the Common Stock is registered under the Exchange Act and to the extent provided for in the applicable Option agreement or approved by the Board, in its sole discretion, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their Fair Market Value, *provided* (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the

Company, was owned by the Participant for such minimum period of time, if any, as may be established by the Board in its discretion and (iii) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements;

(4) to the extent provided for in the applicable Nonstatutory Stock Option agreement or approved by the Board in its sole discretion, by delivery of a notice of "net exercise" to the Company, as a result of which the Participant would receive (i) the number of shares underlying the portion of the Option being exercised less (ii) such number of shares as is equal to (A) the aggregate exercise price for the portion of the Option being exercised divided by (B) the Fair Market Value on the date of exchange.

(5) to the extent permitted by applicable law and provided for in the applicable Option agreement or approved by the Board, in its sole discretion, by (i) delivery of a promissory note of the Participant to the Company on terms determined by the Board, or (ii) payment of such other lawful consideration as the Board may determine; or

(6) by any combination of the above permitted forms of payment.

6. Stock Appreciation Rights

(a) General. The Board may grant Awards consisting of stock appreciation rights ("**SARs**") entitling the holder, upon exercise, to receive an amount of Common Stock determined by reference to appreciation, from and after the date of grant, in the Fair Market Value of a share of Common Stock over the measurement price established pursuant to Section 6(b). The date as of which such appreciation is determined shall be the exercise date.

(b) Measurement Price. The Board shall establish the measurement price of each SAR and specify it in the applicable SAR agreement. The measurement price shall not be less than 100% of the Fair Market Value on the date the SAR is granted.

(c) Duration of SARs. Each SAR shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable SAR agreement; *provided, however*, that no SAR will be granted with a term in excess of 10 years.

(d) Exercise of SARs. SARs may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic) approved by the Company, together with any other documents required by the Board.

7. Restricted Stock; Restricted Stock Units

(a) General. The Board may grant Awards entitling recipients to acquire shares of Common Stock ("**Restricted Stock**"), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award. The Board may also grant Awards entitling the recipient to receive shares of Common Stock or cash to be delivered at the time such Award vests ("**Restricted Stock Units**") (Restricted Stock and Restricted Stock Units are each referred to herein as a "**Restricted Stock Award**").

(b) Terms and Conditions for All Restricted Stock Awards. The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.

(c) Additional Provisions Relating to Restricted Stock.

(1) Dividends. Unless otherwise provided in the applicable Award agreement, any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Restricted Stock (“**Accrued Dividends**”) shall be paid to the Participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. Each payment of Accrued Dividends will be made no later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the lapsing of the restrictions on transferability and the forfeitability provisions applicable to the underlying shares of Restricted Stock.

(2) Stock Certificates. The Company may require that any stock certificates issued in respect of shares of Restricted Stock, as well as dividends or distributions paid on such Restricted Stock, shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to his or her Designated Beneficiary. “**Designated Beneficiary**” means (i) the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant’s death or (ii) in the absence of an effective designation by a Participant, “**Designated Beneficiary**” the Participant’s estate.

(d) Additional Provisions Relating to Restricted Stock Units.

(1) Settlement. Upon the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each Restricted Stock Unit, the Participant shall be entitled to receive from the Company one share of Common Stock or (if so provided in the applicable Award agreement) an amount of cash equal to the Fair Market Value of one share of Common Stock. The Board may, in its discretion, provide that settlement of Restricted Stock Units shall be deferred, on a mandatory basis or at the election of the Participant in a manner that complies with Section 409A of the Code.

(2) Voting Rights. A Participant shall have no voting rights with respect to any Restricted Stock Units.

(3) Dividend Equivalents. The Award agreement for Restricted Stock Units may provide Participants with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock (“**Dividend Equivalents**”). Dividend Equivalents may be paid currently or credited to an account for the Participants, may be settled in cash and/or shares of Common Stock and may be subject to the same restrictions on transfer and forfeitability as the Restricted Stock Units with respect to which paid, in each case to the extent provided in the applicable Award agreement.

8. Other Stock-Based Awards

(a) General. Other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereunder to Participants ("**Other Stock-Based-Awards**"). Such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock-Based Awards may be paid in shares of Common Stock or cash, as the Board shall determine.

(b) Terms and Conditions. Subject to the provisions of the Plan, the Board shall determine the terms and conditions of each Other Stock-Based Award, including any purchase price applicable thereto.

9. Adjustments for Changes in Common Stock and Certain Other Events

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under the Plan, (ii) the number and class of securities and exercise price per share of each outstanding Option, (iii) the share and per-share provisions and the measurement price of each outstanding SAR, (iv) the number of shares subject to and the repurchase price per share subject to each outstanding Restricted Stock Award and (v) the share and per-share-related provisions and the purchase price, if any, of each outstanding Other Stock-Based Award, shall be equitably adjusted by the Company (or substituted Awards may be made, if applicable) in the manner determined by the Board. Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to an outstanding Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

(b) Reorganization Events.

(1) Definition. A "**Reorganization Event**" shall mean: (a) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any transfer or disposition of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the Company.

(2) Consequences of a Reorganization Event on Awards Other than Restricted Stock.

(i) In connection with a Reorganization Event, the Board may take any one or more of the following actions as to all or any (or any portion of) outstanding Awards other than Restricted Stock on such terms as the Board determines (except to the extent specifically provided otherwise in an applicable Award agreement or another agreement between the Company and the Participant): (i) provide that such Awards shall be assumed, or substantially equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to a Participant, provide that all of the Participant's unexercised Awards will terminate immediately prior to the consummation of such Reorganization Event unless exercised by the Participant (to the extent then exercisable) within a specified period following the date of such notice, (iii) provide that outstanding Awards shall become exercisable, realizable, or deliverable, or restrictions applicable to an Award shall lapse, in whole or in part prior to or upon such Reorganization Event, (iv) in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the "**Acquisition Price**"), make or provide for a cash payment to Participants with respect to each Award held by a Participant equal to (A) the number of shares of Common Stock subject to the vested portion of the Award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such Reorganization Event) multiplied by (B) the excess, if any, of (I) the Acquisition Price over (II) the exercise, measurement or purchase price of such Award and any applicable tax withholdings, in exchange for the termination of such Award, (v) provide that, in connection with a liquidation or dissolution of the Company, Awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings) and (vi) any combination of the foregoing. In taking any of the actions permitted under this Section 9(b)(2), the Board shall not be obligated by the Plan to treat all Awards, all Awards held by a Participant, or all Awards of the same type, identically.

(ii) Notwithstanding the terms of Section 9(b)(2)(A), in the case of outstanding Restricted Stock Units that are subject to Section 409A of the Code: (i) if the applicable Restricted Stock Unit agreement provides that the Restricted Stock Units shall be settled upon a "change in control event" within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(i), and the Reorganization Event constitutes such a "change in control event", then no assumption or substitution shall be permitted pursuant to Section 9(b)(2)(A)(i) and the Restricted Stock Units shall instead be settled in accordance with the terms of the applicable Restricted Stock Unit agreement; and (ii) the Board may only undertake the actions set forth in clauses (iii), (iv) or (v) of Section 9(b)(2)(A) if the Reorganization Event constitutes a "change in control event" as defined under Treasury Regulation Section 1.409A-3(i)(5)(i) and such action is permitted or required by Section 409A of the Code; if the Reorganization Event is not a "change in control event" as so defined or such action is not permitted or required by Section 409A of the Code, and the acquiring or succeeding corporation does not assume or substitute the Restricted Stock Units pursuant to clause (i) of Section 9(b)(2)(A), then the unvested Restricted Stock Units shall terminate immediately prior to the consummation of the Reorganization Event without any payment in exchange therefor.

(iii) For purposes of Section 9(b)(2)(A)(i), an Award (other than Restricted Stock) shall be considered assumed if, following consummation of the Reorganization Event, such Award confers the right to purchase or receive pursuant to the terms of such Award, for each share of Common Stock subject to the Award immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); *provided, however*, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise or settlement of the Award to consist solely of such number of shares of common stock of the acquiring or succeeding corporation (or an affiliate thereof) that the Board determined to be equivalent in value (as of the date of such determination or another date specified by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

(3) Consequences of a Reorganization Event on Restricted Stock. Upon the occurrence of a Reorganization Event other than a liquidation or dissolution of the Company, the repurchase and other rights of the Company with respect to outstanding Restricted Stock shall inure to the benefit of the Company's successor and shall, unless the Board determines otherwise, apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to such Restricted Stock; *provided, however*, that the Board may provide for termination or deemed satisfaction of such repurchase or other rights under the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, either initially or by amendment. Upon the occurrence of a Reorganization Event involving the liquidation or dissolution of the Company, except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, all restrictions and conditions on all Restricted Stock then outstanding shall automatically be deemed terminated or satisfied.

10. General Provisions Applicable to Awards

(a) Transferability of Awards. Awards (or any interest in an Award, including, prior to exercise, any interest in shares of Common Stock issuable upon exercise of an Option or SAR) shall not be sold, assigned, transferred (including by establishing any short position, put equivalent position (as defined in Rule 16a-1 issued under the Exchange Act) or call equivalent position (as defined in Rule 16a-1 issued under the Exchange Act)), pledged, hypothecated or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, and, during the life of the Participant, shall be exercisable only by the Participant; except that Awards may be transferred to family members (as defined in Rule 701(c)(3) under the Securities Act) through gifts or (other than Incentive Stock Options) domestic relations orders or to an executor or guardian upon the death or disability of the Participant. The Company shall not be required to recognize any such permitted transfer until such time as such permitted transferee shall deliver to the Company a written instrument, as a condition to such transfer, in form and

substance satisfactory to the Company confirming that such transferee shall be bound by all of the terms and conditions of the Award. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees. For the avoidance of doubt, nothing contained in this Section 10(a) shall be deemed to restrict a transfer to the Company.

(b) Documentation. Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.

(c) Board Discretion. Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.

(d) Termination of Status. The Board shall determine the effect on an Award of the disability, death, termination or other cessation of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.

(e) Withholding. The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Common Stock under an Award. The Company may decide to satisfy the withholding obligations through additional withholding on salary or wages. If the Company elects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise, vesting or release from forfeiture of an Award or at the same time as payment of the exercise or purchase price unless the Company determines otherwise. If provided for in an Award or approved by the Board in its sole discretion, a Participant may satisfy such tax obligations in whole or in part by delivery (either by actual delivery or attestation) of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value; *provided, however*, except as otherwise provided by the Board, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). Shares used to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.

(f) Amendment of Award.

(1) The Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option. The Participant's consent to such action shall be required unless (i) the Board determines that the action, taking into account any related action, does not materially and adversely affect the Participant's rights under the Plan or (ii) the change is permitted under Section 9.

(2) The Board may, without stockholder approval, amend any outstanding Award granted under the Plan to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Award. The Board may also, without stockholder approval, cancel any outstanding award (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled award.

(g) Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously issued or delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and regulations and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(h) Acceleration. The Board may at any time provide that any Award shall become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

11. Miscellaneous

(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award by virtue of the adoption of the Plan, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares.

(c) Effective Date and Term of Plan. The Plan shall become effective on the date on which it is adopted by the Board. No Awards shall be granted under the Plan after the expiration of 10 years from the earlier of (i) the date on which the Plan was adopted by the Board or (ii) the date the Plan was approved by the Company's stockholders, but Awards previously granted may extend beyond that date.

(d) Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time; *provided* that if at any time the approval of the Company's stockholders is required as to any modification or amendment under Section 422 of the Code or

any successor provision with respect to Incentive Stock Options, the Board may not effect such modification or amendment without such approval. Unless otherwise specified in the amendment, any amendment to the Plan adopted in accordance with this Section 11(d) shall apply to, and be binding on the holders of, all Awards outstanding under the Plan at the time the amendment is adopted, provided the Board determines that such amendment, taking into account any related action, does not materially and adversely affect the rights of Participants under the Plan.

(e) Authorization of Sub-Plans (including Grants to non-U.S. Employees). The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable securities, tax or other laws of various jurisdictions. The Board shall establish such sub-plans by adopting supplements to the Plan containing (i) such limitations on the Board's discretion under the Plan as the Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.

(f) Compliance with Section 409A of the Code. Except as provided in individual Award agreements initially or by amendment, if and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes "nonqualified deferred compensation" within the meaning of Section 409A of the Code and (ii) the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of "separation from service" (as determined under Section 409A of the Code) (the "**New Payment Date**"), except as Section 409A of the Code may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A of the Code but do not to satisfy the conditions of that section.

(g) Limitations on Liability. Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, other employee, or agent of the Company will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan, nor will such individual be personally liable with respect to the Plan because of any contract or other instrument he or she executes in his or her capacity as a director, officer, other employee, or agent of the Company. The Company will indemnify and hold harmless each director, officer, other employee, or agent of the Company to whom any duty or power relating to the administration or interpretation of the

Plan has been or will be delegated, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Board's approval) arising out of any act or omission to act concerning the Plan unless arising out of such person's own fraud or bad faith.

(h) Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than the State of Delaware.

SERES HEALTH, INC.
2012 STOCK INCENTIVE PLAN

CALIFORNIA SUPPLEMENT

Pursuant to Section 11(e) of the Plan, the Board has adopted this supplement for purposes of satisfying the requirements of Section 25102(o) of the California Law:

Any Awards granted under the Plan to a Participant who is a resident of the State of California on the date of grant (a "**California Participant**") shall be subject to the following additional limitations, terms and conditions:

1. Additional Limitations on Options.

(a) Maximum Duration of Options. No Options granted to California Participants shall have a term in excess of 10 years measured from the Option grant date.

(b) Minimum Exercise Period Following Termination. Unless a California Participant's employment is terminated for cause (as defined by applicable law, the terms of the Plan or option grant or a contract of employment), in the event of termination of employment of such Participant, such Participant shall have the right to exercise an Option, to the extent that such Participant is entitled to exercise such Option on the date employment terminated, until the earlier of: (i) at least six months from the date of termination, if termination was caused by such Participant's death or disability, (ii) at least 30 days from the date of termination, if termination was caused other than by such Participant's death or disability and (iii) the Option expiration date.

2. Additional Limitations for Other Stock-Based Awards. The terms of all Awards granted to a California Participant under Section 8 of the Plan shall comply, to the extent applicable, with Sections 260.140.42, 260.140.45 and 260.140.46 of the California Code of Regulations.

3. Additional Limitations on Timing of Awards. No Award granted to a California Participant shall become exercisable, vested or realizable, as applicable to such Award, unless the Plan has been approved by the holders of a majority of the Company's outstanding voting securities by the later of (i) within 12 months before or after the date the Plan was adopted by the Board, or (ii) prior to or within 12 months of the granting of any Award to a California Participant.

4. Additional Restriction Regarding Recapitalizations, Stock Splits, Etc. For purposes of Section 9 of the Plan, in the event of a stock split, reverse stock split, stock dividend, recapitalization, combination, reclassification or other distribution of the Company's securities underlying the Award without the receipt of consideration by the Company, the number of securities purchasable, and in the case of Options, the exercise price of such Options, must be proportionately adjusted.

5. Additional Limitations on Transferability of Awards. Notwithstanding the provisions of Section 10(a) of the Plan, an Award granted to a California Participant may not be transferred to an executor or guardian upon the disability of the Participant.

Incentive Stock Option Agreement
Granted Under 2012 Stock Incentive Plan

1. Grant of Option.

This agreement evidences the grant by Seres Health, Inc., a Delaware corporation (the "Company"), on [], 20[] (the "Grant Date") to [], an employee of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2012 Stock Incentive Plan (the "Plan"), a total of [] shares (the "Shares") of common stock, \$0.001 par value per share, of the Company ("Common Stock") at \$[] per Share. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on [Grant Date + 10 Years – 1 Day] (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") as to [25%] of the original number of Shares on the [first] anniversary of the Vesting Commencement Date (as defined below) and as to an additional [2.0833%] of the original number of Shares at the end of each successive [month] following the first anniversary of the Vesting Commencement Date until the [fourth] anniversary of the Vesting Commencement Date, at which time the option shall vest in full. For purposes of this Agreement, "Vesting Commencement Date" shall mean [].

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as Exhibit A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee or officer of, or consultant or advisor to, the Company or any parent or subsidiary of the Company as defined in Section 424(e) or (f) of the Code (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for "cause" as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Termination for Cause. If, prior to the Final Exercise Date, the Participant's employment is terminated by the Company for Cause (as defined below), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment. If, prior to the Final Exercise Date, the Participant is given notice by the Company of the termination of his or her employment by the Company for Cause, and the effective date of such employment termination is subsequent to the date of delivery of such notice, the right to exercise this option shall be suspended from the time of the delivery of such notice until the earlier of (i) such time as it is determined or otherwise agreed that the Participant's employment shall not be terminated for Cause as provided in such notice or (ii) the effective date of such termination of employment (in which case the right to exercise this option shall, pursuant to the preceding sentence, terminate upon the effective date of such termination of employment). If the Participant is party to an employment or severance agreement with the Company that contains a definition of "cause" for termination of employment, "Cause" shall have the meaning ascribed to such term in such agreement. Otherwise, "Cause" shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant's employment shall be considered to have been terminated for Cause if the Company determines, within 30 days after the Participant's resignation, that termination for Cause was warranted.

4. Company Right of First Refusal.

(a) Notice of Proposed Transfer. If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, "transfer") any Shares acquired upon exercise of this option, then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) Company Right to Purchase. For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for such Offered Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) Shares Not Purchased By Company. If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 4 shall remain subject to the right of first refusal set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) Consequences of Non-Delivery. After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) Exempt Transactions. The following transactions shall be exempt from the provisions of this Section 4:

- (1) any transfer of Shares to or for the benefit of any spouse, child or grandchild of the Participant, or to a trust for their benefit;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the “Securities Act”); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal set forth in this Section 4.

(f) Assignment of Company Right. The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities.

(g) Termination. The provisions of this Section 4 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company’s voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) No Obligation to Recognize Invalid Transfer. The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

(i) Legends. The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

“The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain stock option agreement with the Company.”

5. Agreement in Connection with Initial Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any other securities of the Company or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock or other securities of the Company, whether any transaction described in clause (a) or (b) is to be settled by delivery of securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days after the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address Rule 2711(f) of the National Association of Securities Dealers, Inc. or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the "lock-up" period.

6. Tax Matters.

(a) Withholding. No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

(b) Disqualifying Disposition. If the Participant disposes of Shares acquired upon exercise of this option within two years from the Grant Date or one year after such Shares were acquired pursuant to exercise of this option, the Participant shall notify the Company in writing of such disposition.

7. Transfer Restrictions.

(a) This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

(b) The Participant agrees that he or she will not transfer any Shares issued pursuant to the exercise of this option unless the transferee, as a condition to such transfer, delivers to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of Section 4 and Section 5; provided that such a written confirmation shall not be required with respect to (1) Section 4 after such provision has terminated in accordance with Section 4(g) or (2) Section 5 after the completion of the lock-up period in connection with the Company's initial underwritten public offering.

8. Provisions of the Plan.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

IN WITNESS WHEREOF, the Company has caused this option to be executed under its corporate seal by its duly authorized officer. This option shall take effect as a sealed instrument.

SERES HEALTH, INC.

By: _____

Name: _____

Title: _____

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing option and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2012 Stock Incentive Plan.

PARTICIPANT:

Address: _____

NOTICE OF STOCK OPTION EXERCISE

Date: _____ 1

Seres Health, Inc.
[STREET ADDRESS]
[CITY, STATE ZIP]

Attention: Treasurer

Dear Sir or Madam:

I am the holder of an Incentive Stock Option granted to me under the Seres Health, Inc. (the "Company") 2012 Stock Incentive Plan on _____ 2
for the purchase of _____ 3 shares of Common Stock of the Company at a purchase price of \$ _____ 4 per share.

I hereby exercise my option to purchase _____ 5 shares of Common Stock (the "Shares"), for which I have enclosed _____ 6 in the amount of
7. Please register my stock certificate as follows:

Name(s): _____ 8

Address: _____

Tax I.D. #: _____ 9

- 1 Enter the date of exercise.
- 2 Enter the date of grant.
- 3 Enter the total number of shares of Common Stock for which the option was granted.
- 4 Enter the option exercise price per share of Common Stock.
- 5 Enter the number of shares of Common Stock to be purchased upon exercise of all or part of the option.
- 6 Enter "cash", "personal check" or if permitted by the option or Plan, "stock certificates No. XXXX and XXXX".
- 7 Enter the dollar amount (price per share of Common Stock times the number of shares of Common Stock to be purchased), or the number of shares tendered. Fair market value of shares tendered, together with cash or check, must cover the purchase price of the shares issued upon exercise.
- 8 Enter name(s) to appear on stock certificate: (a) Your name only; (b) Your name and other name (i.e., John Doe and Jane Doe, Joint Tenants With Right of Survivorship); or (c) In the case of a Nonstatutory option only, a Child's name, with you as custodian (i.e., Jane Doe, Custodian for Tommy Doe). Note: There may be income and/or gift tax consequences of registering shares in a Child's name.
- 9 Social Security Number of Holder(s).

I represent, warrant and covenant as follows:

1. I am purchasing the Shares for my own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act of 1933 (the "Securities Act"), or any rule or regulation under the Securities Act.
2. I have had such opportunity as I have deemed adequate to obtain from representatives of the Company such information as is necessary to permit me to evaluate the merits and risks of my investment in the Company.
3. I have sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.
4. I can afford a complete loss of the value of the Shares and am able to bear the economic risk of holding such Shares for an indefinite period.
5. I understand that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act, (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

Very truly yours,

(Signature)

SERES THERAPEUTICS, INC.

2015 INCENTIVE AWARD PLAN

1. **Purpose.**

The Plan's purpose is to enhance the Company's ability to attract, retain and motivate persons who make (or are expected to make) important contributions to the Company by providing these individuals with equity ownership opportunities. Capitalized terms used in the Plan are defined in Section 11.

2. **Eligibility.**

Service Providers are eligible to be granted Awards under the Plan, subject to the limitations described herein.

3. **Administration and Delegation.**

(a) *Administration.* The Plan is administered by the Administrator. The Administrator has authority to determine which Service Providers receive Awards, grant Awards and set Award terms and conditions, subject to the conditions and limitations in the Plan. The Administrator also has the authority to take all actions and make all determinations under the Plan, to interpret the Plan and Award Agreements and to adopt, amend and repeal Plan administrative rules, guidelines and practices as it deems advisable. The Administrator may correct defects and ambiguities, supply omissions and reconcile inconsistencies in the Plan or any Award as it deems necessary or appropriate to administer the Plan and any Awards. The Administrator's determinations under the Plan are in its sole discretion and will be final and binding on all persons having or claiming any interest in the Plan or any Award.

(b) *Appointment of Committees.* To the extent Applicable Laws permit, the Board may delegate any or all of its powers under the Plan to one or more Committees. The Board may abolish any Committee or re-vest in itself any previously delegated authority at any time.

4. **Stock Available for Awards.**

(a) *Number of Shares.* Subject to adjustment under Section 8 and the terms of this Section 4, Awards may be made under the Plan covering up to the Overall Share Limit. As of the Plan's effective date under Section 10(c), the Company will cease granting awards under the Prior Plans; however, Prior Plan Awards will remain subject to the terms of the applicable Prior Plan. Shares issued under the Plan may consist of authorized but unissued Shares, Shares purchased on the open market or treasury Shares.

(b) *Share Recycling.* If all or any part of an Award or Prior Plan Award expires, lapses or is terminated, exchanged for cash, surrendered, repurchased, canceled without having been fully exercised or forfeited, in any case, in a manner that results in the Company acquiring Shares covered by the Award or Prior Plan Award at a price not greater than the price (as adjusted to reflect any Equity Restructuring) paid by the Participant for such Shares or not issuing any Shares covered by the Award or Prior Plan Award, the unused Shares covered by the Award or Prior Plan Award will, as applicable, become or again be available for Award grants under the Plan. Further, Shares delivered (either by actual delivery or attestation) to the Company by a Participant to satisfy the applicable exercise or purchase price of an Award or Prior Plan Award and/or to satisfy any applicable tax withholding obligation (including Shares retained by the Company from the Award or Prior Plan Award being exercised or purchased and/or creating the tax obligation) will, as applicable, become or again be available for Award grants under the Plan. The payment of Dividend Equivalents in cash in conjunction with any outstanding Awards or Prior Plan Awards shall not count against the Overall Share Limit.

(c) *Incentive Stock Option Limitations.* Notwithstanding anything to the contrary herein, no more than [] Shares may be issued pursuant to the exercise of Incentive Stock Options.

(d) *Substitute Awards.* In connection with an entity's merger or consolidation with the Company or the Company's acquisition of an entity's property or stock, the Administrator may grant Awards in substitution for any options or other stock or stock-based awards granted before such merger or consolidation by such entity or its affiliate. Substitute Awards may be granted on such terms as the Administrator deems appropriate, notwithstanding limitations on Awards in the Plan. Substitute Awards will not count against the Overall Share Limit, except that Shares acquired by exercise of substitute Incentive Stock Options will count against the maximum number of Shares that may be issued pursuant to the exercise of Incentive Stock Options under the Plan.

(e) *Non-Employee Director Award Limit.* Notwithstanding any provision to the contrary in the Plan, the maximum aggregate grant date fair value (as determined in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, or any successor thereto) of Awards granted to a non-employee Director as compensation for services as a non-employee Director during any fiscal year of the Company may not exceed \$[500,000].

5. Stock Options and Stock Appreciation Rights.

(a) *General.* The Administrator may grant Options or Stock Appreciation Rights to Service Providers subject to the limitations in the Plan, including Section 9(i) with respect to Incentive Stock Options. The Administrator will determine the number of Shares covered by each Option and Stock Appreciation Right, the exercise price of each Option and Stock Appreciation Right and the conditions and limitations applicable to the exercise of each Option and Stock Appreciation Right. A Stock Appreciation Right will entitle the Participant (or other person entitled to exercise the Stock Appreciation Right) to receive from the Company upon exercise of the exercisable portion of the Stock Appreciation Right an amount determined by multiplying the excess, if any, of the Fair Market Value of one Share on the date of exercise over the exercise price per Share of the Stock Appreciation Right by the number of Shares with respect to which the Stock Appreciation Right is exercised, subject to any limitations of the Plan or that the Administrator may impose and payable in cash, Shares valued at Fair Market Value or a combination of the two as the Administrator may determine or provide in the Award Agreement.

(b) *Exercise Price.* The Administrator will establish each Option's and Stock Appreciation Right's exercise price and specify the exercise price in the Award Agreement. The exercise price will not be less than 100% of the Fair Market Value on the grant date of the Option or Stock Appreciation Right.

(c) *Duration of Options.* Each Option or Stock Appreciation Right will be exercisable at such times and as specified in the Award Agreement, provided that the term of an Option or Stock Appreciation Right will not exceed ten years.

(d) *Exercise.* Options and Stock Appreciation Rights may be exercised by delivering to the Company a written notice of exercise, in a form the Administrator approves (which may be electronic), signed by the person authorized to exercise the Option or Stock Appreciation Right, together with, as applicable, payment in full (i) as specified in Section 5(e) for the number of Shares for which the Award is exercised and (ii) as specified in Section 9(e) for any applicable taxes. Unless the Administrator otherwise determines, an Option or Stock Appreciation Right may not be exercised for a fraction of a Share.

(e) *Payment Upon Exercise.* The exercise price of an Option must be paid in cash, wire transfer of immediately available funds or by check payable to the order of the Company or, subject to Section 10(h), any Company insider trading policy (including blackout periods) and Applicable Laws, by:

(i) if there is a public market for Shares at the time of exercise, unless the Administrator otherwise determines, (A) delivery (including telephonically to the extent permitted by the Company) of an irrevocable and unconditional undertaking by a broker acceptable to the Company to deliver promptly to the Company sufficient funds to pay the exercise price, or (B) the Participant's delivery to the Company of a copy of irrevocable and unconditional instructions to a broker acceptable to the Company to deliver promptly to the Company cash or a check sufficient to pay the exercise price; provided that such amount is paid to the Company at such time as may be required by the Administrator;

(ii) to the extent permitted by the Administrator, delivery (either by actual delivery or attestation) of Shares owned by the Participant valued at their Fair Market Value;

(iii) to the extent permitted by the Administrator, surrendering Shares then issuable upon the Option's exercise valued at their Fair Market Value on the exercise date;

(iv) to the extent permitted by the Administrator, delivery of a promissory note or any other property that the Administrator determines is good and valuable consideration; or

(v) any combination of the above permitted payment forms (including cash, wire transfer or check).

6. ***Restricted Stock; Restricted Stock Units.***

(a) *General.* The Administrator may grant Restricted Stock, or the right to purchase Restricted Stock, to any Service Provider, subject to the Company's right to repurchase all or part of such shares at their issue price or other stated or formula price from the Participant (or to require forfeiture of such shares) if conditions the Administrator specifies in the Award Agreement are not satisfied before the end of the applicable restriction period or periods that the Administrator establishes for such Award. In addition, the Administrator may grant to Service Providers Restricted Stock Units, which may be subject to vesting and forfeiture conditions during the applicable restriction period or periods, as set forth in an Award Agreement. The Administrator will determine and set forth in the Award Agreement the terms and conditions for each Restricted Stock and Restricted Stock Unit Award, subject to the conditions and limitations contained in the Plan.

(b) *Restricted Stock.*

(i) *Dividends.* Participants holding shares of Restricted Stock will be entitled to all ordinary cash dividends paid with respect to such shares, unless the Administrator provides otherwise in the Award Agreement. In addition, unless the Administrator provides otherwise, if any dividends or distributions are paid in Shares, or consist of a dividend or distribution to holders of Common Stock of property other than an ordinary cash dividend, the Shares or other property will be subject to the same restrictions on transferability and forfeitability as the shares of Restricted Stock with respect to which they were paid.

(ii) *Stock Certificates.* The Company may require that the Participant deposit in escrow with the Company (or its designee) any stock certificates issued in respect of shares of Restricted Stock, together with a stock power endorsed in blank.

(c) *Restricted Stock Units.*

(i) *Settlement.* The Administrator may provide that settlement of Restricted Stock Units will occur upon or as soon as reasonably practicable after the Restricted Stock Units vest or will instead be deferred, on a mandatory basis or at the Participant's election, in a manner intended to comply with Section 409A.

(ii) *Stockholder Rights.* A Participant will have no rights of a stockholder with respect to Shares subject to any Restricted Stock Unit unless and until the Shares are delivered in settlement of the Restricted Stock Unit.

(iii) *Dividend Equivalents.* If the Administrator provides, a grant of Restricted Stock Units may provide a Participant with the right to receive Dividend Equivalents. Dividend Equivalents may be paid currently or credited to an account for the Participant, settled in cash or Shares and subject to the same restrictions on transferability and forfeitability as the Restricted Stock Units with respect to which the Dividend Equivalents are granted and subject to other terms and conditions as set forth in the Award Agreement.

7. *Other Stock or Cash Based Awards.*

Other Stock or Cash Based Awards may be granted to Participants, including Awards entitling Participants to receive Shares to be delivered in the future and including annual or other periodic or long-term cash bonus awards (whether based on specified Performance Criteria or otherwise), in each case subject to any conditions and limitations in the Plan. Such Other Stock or Cash Based Awards will also be available as a payment form in the settlement of other Awards, as standalone payments and as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock or Cash Based Awards may be paid in Shares, cash or other property, as the Administrator determines. Subject to the provisions of the Plan, the Administrator will determine the terms and conditions of each Other Stock or Cash Based Award, including any purchase price, performance goal (which may be based on the Performance Criteria), transfer restrictions, and vesting conditions, which will be set forth in the applicable Award Agreement.

8. *Adjustments for Changes in Common Stock and Certain Other Events.*

(a) *Equity Restructuring.* In connection with any Equity Restructuring, notwithstanding anything to the contrary in this Section 8, the Administrator will equitably adjust each outstanding Award as it deems appropriate to reflect the Equity Restructuring, which may include adjusting the number and type of securities subject to each outstanding Award and/or the Award's exercise price or grant price (if applicable), granting new Awards to Participants, and making a cash payment to Participants. The adjustments provided under this Section 8(a) will be nondiscretionary and final and binding on the affected Participant and the Company; provided that the Administrator will determine whether an adjustment is equitable.

(b) *Corporate Transactions.* In the event of any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), reorganization, merger, consolidation, combination, repurchase, recapitalization, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or sale or exchange of Common Stock or other securities of the Company, Change in Control, issuance of warrants or other rights to purchase Common Stock or other securities of the Company, other similar corporate transaction or event, other unusual or nonrecurring transaction or event affecting the Company or its financial statements or any change in any Applicable Laws or accounting principles, the Administrator, on such

terms and conditions as it deems appropriate, either by the terms of the Award or by action taken prior to the occurrence of such transaction or event (except that action to give effect to a change in Applicable Law or accounting principles may be made within a reasonable period of time after such change) and either automatically or upon the Participant's request, is hereby authorized to take any one or more of the following actions whenever the Administrator determines that such action is appropriate in order to (x) prevent dilution or enlargement of the benefits or potential benefits intended by the Company to be made available under the Plan or with respect to any Award granted or issued under the Plan, (y) to facilitate such transaction or event or (z) give effect to such changes in Applicable Laws or accounting principles:

(i) To provide for the cancellation of any such Award in exchange for either an amount of cash or other property with a value equal to the amount that could have been obtained upon the exercise or settlement of the vested portion of such Award or realization of the Participant's rights under the vested portion of such Award, as applicable; provided that, if the amount that could have been obtained upon the exercise or settlement of the vested portion of such Award or realization of the Participant's rights, in any case, is equal to or less than zero, then the Award may be terminated without payment;

(ii) To provide that such Award shall vest and, to the extent applicable, be exercisable as to all shares covered thereby, notwithstanding anything to the contrary in the Plan or the provisions of such Award;

(iii) To provide that such Award be assumed by the successor or survivor corporation, or a parent or subsidiary thereof, or shall be substituted for by awards covering the stock of the successor or survivor corporation, or a parent or subsidiary thereof, with appropriate adjustments as to the number and kind of shares and/or applicable exercise or purchase price, in all cases, as determined by the Administrator;

(iv) To make adjustments in the number and type of shares of Common Stock (or other securities or property) subject to outstanding Awards and/or with respect to which Awards may be granted under the Plan (including, but not limited to, adjustments of the limitations in Section 4 hereof on the maximum number and kind of shares which may be issued) and/or in the terms and conditions of (including the grant or exercise price), and the criteria included in, outstanding Awards;

(v) To replace such Award with other rights or property selected by the Administrator; and/or

(vi) To provide that the Award will terminate and cannot vest, be exercised or become payable after the applicable event.

(c) *Administrative Stand Still.* In the event of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other extraordinary transaction or change affecting the Shares or the share price of Common Stock, including any Equity Restructuring or any securities offering or other similar transaction, for administrative convenience, the Administrator may refuse to permit the exercise of any Award for up to sixty days before or after such transaction.

(d) *General.* Except as expressly provided in the Plan or the Administrator's action under the Plan, no Participant will have any rights due to any subdivision or consolidation of Shares of any class, dividend payment, increase or decrease in the number of Shares of any class or dissolution, liquidation, merger, or consolidation of the Company or other corporation. Except as expressly provided

with respect to an Equity Restructuring under Section 8(a) above or the Administrator's action under the Plan, no issuance by the Company of Shares of any class, or securities convertible into Shares of any class, will affect, and no adjustment will be made regarding, the number of Shares subject to an Award or the Award's grant or exercise price. The existence of the Plan, any Award Agreements and the Awards granted hereunder will not affect or restrict in any way the Company's right or power to make or authorize (i) any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, (ii) any merger, consolidation dissolution or liquidation of the Company or sale of Company assets or (iii) any sale or issuance of securities, including securities with rights superior to those of the Shares or securities convertible into or exchangeable for Shares. The Administrator may treat Participants and Awards (or portions thereof) differently under this Section 8.

9. General Provisions Applicable to Awards.

(a) *Transferability.* Except as the Administrator may determine or provide in an Award Agreement or otherwise for Awards other than Incentive Stock Options, Awards may not be sold, assigned, transferred, pledged or otherwise encumbered, either voluntarily or by operation of law, except by will or the laws of descent and distribution, or, subject to the Administrator's consent, pursuant to a domestic relations order, and, during the life of the Participant, will be exercisable only by the Participant. References to a Participant, to the extent relevant in the context, will include references to a Participant's authorized transferee that the Administrator specifically approves.

(b) *Documentation.* Each Award will be evidenced in an Award Agreement, which may be written or electronic, as the Administrator determines. Each Award may contain terms and conditions in addition to those set forth in the Plan.

(c) *Discretion.* Except as the Plan otherwise provides, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award to a Participant need not be identical, and the Administrator need not treat Participants or Awards (or portions thereof) uniformly.

(d) *Termination of Status.* The Administrator will determine how the disability, death, retirement, authorized leave of absence or any other change or purported change in a Participant's Service Provider status affects an Award and the extent to which, and the period during which, the Participant, the Participant's legal representative, conservator, guardian or Designated Beneficiary may exercise rights under the Award, if applicable.

(e) *Withholding.* Each Participant must pay the Company, or make provision satisfactory to the Administrator for payment of, any taxes required by law to be withheld in connection with such Participant's Awards by the date of the event creating the tax liability. The Company may deduct an amount sufficient to satisfy such tax obligations based on the minimum statutory withholding rates from any payment of any kind otherwise due to a Participant. Participants may satisfy such tax obligations in cash, by wire transfer or immediately available funds, by check made payable to the order of the Company, or subject to Section 10(h) and any Company insider trading policy (including blackout periods), (i) to the extent permitted by the Administrator, in whole or in part by delivery of Shares, including Shares retained from the Award creating the tax obligation, valued at their Fair Market Value, (ii) if there is a public market for Shares at the time the tax obligations are satisfied, unless the Administrator otherwise determines, (A) delivery (including telephonically to the extent permitted by the Company) of an irrevocable and unconditional undertaking by a broker acceptable to the Company to deliver promptly to the Company sufficient funds to satisfy the tax obligations, or (B) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a broker acceptable to the Company to deliver promptly to the Company cash or a check sufficient to satisfy the tax withholding; provided that such amount is paid to the Company at such time as may be required by the

Administrator, or (iii) any combination of the foregoing permitted payment forms (including cash, wire transfer or check). If any tax withholding obligation will be satisfied under clause (i) of the immediately preceding sentence by the Company's retention of Shares from the Award creating the tax obligation and there is a public market for Shares at the time the tax obligation is satisfied, the Company may elect to instruct any brokerage firm determined acceptable to the Company for such purpose to sell on the applicable Participant's behalf some or all of the Shares retained and to remit the proceeds of the sale to the Company or its designee, and each Participant's acceptance of an Award under the Plan will constitute the Participant's authorization to the Company and instruction and authorization to such brokerage firm to complete the transactions described in this sentence.

(f) *Amendment of Award; Repricing.* The Administrator may amend, modify or terminate any outstanding Award, including by substituting another Award of the same or a different type, changing the exercise or settlement date, and converting an Incentive Stock Option to a Non-Qualified Stock Option. The Participant's consent to such action will be required unless (i) the action, taking into account any related action, does not materially and adversely affect the Participant's rights under the Award, or (ii) the change is permitted under Section 8 or pursuant to Section 10(f). Notwithstanding the foregoing or anything in the Plan to the contrary, the Administrator may, without the approval of the stockholders of the Company, reduce the exercise price per share of outstanding Options or Stock Appreciation Rights or cancel outstanding Options or Stock Appreciation Rights in exchange for cash, other Awards or Options or Stock Appreciation Rights with an exercise price per share that is less than the exercise price per share of the original Options or Stock Appreciation Rights.

(g) *Conditions on Delivery of Stock.* The Company will not be obligated to deliver any Shares under the Plan or remove restrictions from Shares previously delivered under the Plan until (i) all Award conditions have been met or removed to the Company's satisfaction, (ii) as determined by the Company, all other legal matters regarding the issuance and delivery of such Shares have been satisfied, including any applicable securities laws and stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Administrator deems necessary or appropriate to satisfy any Applicable Laws. The Company's inability to obtain authority from any regulatory body having jurisdiction, which the Administrator determines is necessary to the lawful issuance and sale of any securities, will relieve the Company of any liability for failing to issue or sell such Shares as to which such requisite authority has not been obtained.

(h) *Acceleration.* The Administrator may at any time provide that any Award will become immediately vested and fully or partially exercisable, free of some or all restrictions or conditions, or otherwise fully or partially realizable.

(i) *Additional Terms of Incentive Stock Options.* The Administrator may grant Incentive Stock Options only to employees of the Company, any of its present or future parent or subsidiary corporations, as defined in Sections 424(e) or (f) of the Code, respectively, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code. If an Incentive Stock Option is granted to a Greater Than 10% Stockholder, the exercise price will not be less than 110% of the Fair Market Value on the Option's grant date, and the term of the Option will not exceed five years. All Incentive Stock Options will be subject to and construed consistently with Section 422 of the Code. By accepting an Incentive Stock Option, the Participant agrees to give prompt notice to the Company of dispositions or other transfers (other than in connection with a Change in Control) of Shares acquired under the Option made within (i) two years from the grant date of the Option or (ii) one year after the transfer of such Shares to the Participant, specifying the date of the disposition or other transfer and the amount the Participant realized, in cash, other property, assumption of indebtedness or other consideration, in such disposition or other transfer. Neither the Company nor the Administrator will be liable to a Participant, or any other party, if an Incentive Stock Option fails or ceases to qualify as an

“incentive stock option” under Section 422 of the Code . Any Incentive Stock Option or portion thereof that fails to qualify as an “incentive stock option” under Section 422 of the Code for any reason, including becoming exercisable with respect to Shares having a fair market value exceeding the \$100,000 limitation under Treasury Regulation Section 1.422-4, will be a Non-Qualified Stock Option.

10. **Miscellaneous.**

(a) *No Right to Employment or Other Status.* No person will have any claim or right to be granted an Award, and the grant of an Award will not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan or any Award, except as expressly provided in an Award Agreement.

(b) *No Rights as Stockholder; Certificates.* Subject to the Award Agreement, no Participant or Designated Beneficiary will have any rights as a stockholder with respect to any Shares to be distributed under an Award until becoming the record holder of such Shares. Notwithstanding any other provision of the Plan, unless the Administrator otherwise determines or Applicable Laws require, the Company will not be required to deliver to any Participant certificates evidencing Shares issued in connection with any Award and instead such Shares may be recorded in the books of the Company (or, as applicable, its transfer agent or stock plan administrator). The Company may place legends on stock certificates issued under the Plan that the Administrator deems necessary or appropriate to comply with Applicable Laws.

(c) *Effective Date and Term of Plan.* The Plan will become effective on the day prior to the Public Trading Date and will remain in effect until the tenth anniversary of such date, unless earlier terminated by the Board. No Awards may be granted under the Plan during any suspension period or after Plan termination. Notwithstanding anything in the Plan to the contrary, an Incentive Stock Option may not be granted under the Plan after ten years from the earlier of (i) the date the Board adopted the Plan or (ii) the date the Company’s stockholders approved the Plan, but Awards previously granted may extend beyond that date in accordance with the Plan. If the Plan is not approved by the Company’s stockholders, (i) it will not become effective, (ii) no Awards shall be granted thereunder, and (iii) the Prior Plans will continue in full force and effect in accordance with their terms.

(d) *Amendment of Plan.* The Administrator may amend, suspend or terminate the Plan at any time; provided that no amendment, other than an increase to the Overall Share Limit, may materially and adversely affect any Award outstanding at the time of such amendment without the affected Participant’s consent. Awards outstanding at the time of any Plan suspension or termination will continue to be governed by the Plan and the Award Agreement, as in effect before such suspension or termination. The Board will obtain stockholder approval of any Plan amendment to the extent necessary to comply with Applicable Laws.

(e) *Provisions for Foreign Participants.* The Administrator may modify Awards granted to Participants who are foreign nationals or employed outside the United States or establish subplans or procedures under the Plan to address differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.

(f) *Section 409A.*

(i) *General.* The Company intends that all Awards be structured to comply with, or be exempt from, Section 409A, such that no adverse tax consequences, interest, or penalties under Section 409A apply. Notwithstanding anything in the Plan or any Award Agreement to the contrary, the

Administrator may, without a Participant's consent, amend this Plan or Awards, adopt policies and procedures, or take any other actions (including amendments, policies, procedures and retroactive actions) as are necessary or appropriate to preserve the intended tax treatment of Awards, including any such actions intended to (A) exempt this Plan or any Award from Section 409A, or (B) comply with Section 409A, including regulations, guidance, compliance programs and other interpretative authority that may be issued after an Award's grant date. The Company makes no representations or warranties as to an Award's tax treatment under Section 409A or otherwise. The Company will have no obligation under this Section 10(f) or otherwise to avoid the taxes, penalties or interest under Section 409A with respect to any Award and will have no liability to any Participant or any other person if any Award, compensation or other benefits under the Plan are determined to constitute noncompliant "nonqualified deferred compensation" subject to taxes, penalties or interest under Section 409A.

(ii) *Separation from Service.* If an Award constitutes "nonqualified deferred compensation" under Section 409A, any payment or settlement of such Award upon a termination of a Participant's Service Provider relationship will, to the extent necessary to avoid taxes under Section 409A, be made only upon the Participant's "separation from service" (within the meaning of Section 409A), whether such "separation from service" occurs upon or after the termination of the Participant's Service Provider relationship. For purposes of this Plan or any Award Agreement relating to any such payments or benefits, references to a "termination," "termination of employment" or like terms means a "separation from service."

(iii) *Payments to Specified Employees.* Notwithstanding any contrary provision in the Plan or any Award Agreement, any payment(s) of "nonqualified deferred compensation" required to be made under an Award to a "specified employee" (as defined under Section 409A and as the Administrator determines) due to his or her "separation from service" will, to the extent necessary to avoid taxes under Section 409A(a)(2)(B)(i) of the Code, be delayed for the six-month period immediately following such "separation from service" (or, if earlier, until the specified employee's death) and will instead be paid (as set forth in the Award Agreement) on the day immediately following such six-month period or as soon as administratively practicable thereafter (without interest). Any payments of "nonqualified deferred compensation" under such Award payable more than six months following the Participant's "separation from service" will be paid at the time or times the payments are otherwise scheduled to be made.

(g) *Limitations on Liability.* Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, other employee or agent of the Company or any Subsidiary will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan or any Award, and such individual will not be personally liable with respect to the Plan because of any contract or other instrument executed in his or her capacity as an Administrator, director, officer, other employee or agent of the Company or any Subsidiary. The Company will indemnify and hold harmless each director, officer, other employee and agent of the Company or any Subsidiary that has been or will be granted or delegated any duty or power relating to the Plan's administration or interpretation, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Administrator's approval) arising from any act or omission concerning this Plan unless arising from such person's own fraud or bad faith.

(h) *Lock-Up Period.* The Company may, at the request of any underwriter representative or otherwise, in connection with registering the offering of any Company securities under the Securities Act, prohibit Participants from, directly or indirectly, selling or otherwise transferring any Shares or other Company securities during a period of up to one hundred eighty days following the effective date of a Company registration statement filed under the Securities Act, or such longer period as determined by the underwriter.

(i) *Data Privacy.* As a condition for receiving any Award, each Participant explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of personal data as described in this paragraph by and among the Company and its Subsidiaries and affiliates exclusively for implementing, administering and managing the Participant's participation in the Plan. The Company and its Subsidiaries and affiliates may hold certain personal information about a Participant, including the Participant's name, address and telephone number; birthdate; social security, insurance number or other identification number; salary; nationality; job title(s); any Shares held in the Company or its Subsidiaries and affiliates; and Award details, to implement, manage and administer the Plan and Awards (the "**Data**"). The Company and its Subsidiaries and affiliates may transfer the Data amongst themselves as necessary to implement, administer and manage a Participant's participation in the Plan, and the Company and its Subsidiaries and affiliates may transfer the Data to third parties assisting the Company with Plan implementation, administration and management. These recipients may be located in the Participant's country, or elsewhere, and the Participant's country may have different data privacy laws and protections than the recipients' country. By accepting an Award, each Participant authorizes such recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, to implement, administer and manage the Participant's participation in the Plan, including any required Data transfer to a broker or other third party with whom the Company or the Participant may elect to deposit any Shares. The Data related to a Participant will be held only as long as necessary to implement, administer, and manage the Participant's participation in the Plan. A Participant may, at any time, view the Data that the Company holds regarding such Participant, request additional information about the storage and processing of the Data regarding such Participant, recommend any necessary corrections to the Data regarding the Participant or refuse or withdraw the consents in this Section 10(i) in writing, without cost, by contacting the local human resources representative. The Company may cancel Participant's ability to participate in the Plan and, in the Administrator's discretion, the Participant may forfeit any outstanding Awards if the Participant refuses or withdraws the consents in this Section 10(i). For more information on the consequences of refusing or withdrawing consent, Participants may contact their local human resources representative.

(j) *Severability.* If any portion of the Plan or any action taken under it is held illegal or invalid for any reason, the illegality or invalidity will not affect the remaining parts of the Plan, and the Plan will be construed and enforced as if the illegal or invalid provisions had been excluded, and the illegal or invalid action will be null and void.

(k) *Governing Documents.* If any contradiction occurs between the Plan and any Award Agreement or other written agreement between a Participant and the Company (or any Subsidiary) that the Administrator has approved, the Plan will govern, unless it is expressly specified in such Award Agreement or other written document that a specific provision of the Plan will not apply.

(l) *Governing Law.* The Plan and all Awards will be governed by and interpreted in accordance with the laws of the State of Delaware, disregarding any state's choice-of-law principles requiring the application of a jurisdiction's laws other than the State of Delaware.

(m) *Claw-back Provisions.* All Awards (including any proceeds, gains or other economic benefit the Participant actually or constructively receives upon receipt or exercise of any Award or the receipt or resale of any Shares underlying the Award) will be subject to any Company claw-back policy, including any claw-back policy adopted to comply with Applicable Laws (including the Dodd-Frank Wall Street Reform and Consumer Protection Act and any rules or regulations promulgated thereunder) as set forth in such claw-back policy or the Award Agreement.

(n) *Titles and Headings.* The titles and headings in the Plan are for convenience of reference only and, if any conflict, the Plan's text, rather than such titles or headings, will control.

(o) *Conformity to Securities Laws.* Participant acknowledges that the Plan is intended to conform to the extent necessary with Applicable Laws. Notwithstanding anything herein to the contrary, the Plan and all Awards will be administered only in conformance with Applicable Laws. To the extent Applicable Laws permit, the Plan and all Award Agreements will be deemed amended as necessary to conform to Applicable Laws.

(p) *Relationship to Other Benefits.* No payment under the Plan will be taken into account in determining any benefits under any pension, retirement, savings, profit sharing, group insurance, welfare or other benefit plan of the Company or any Subsidiary except as expressly provided in writing in such other plan or an agreement thereunder.

(q) *Broker-Assisted Sales.* In the event of a broker-assisted sale of Shares in connection with the payment of amounts owed by a Participant under or with respect to the Plan or Awards, including amounts to be paid under the final sentence of Section 9(e): (a) any Shares to be sold through the broker-assisted sale will be sold on the day the payment first becomes due, or as soon thereafter as practicable; (b) such Shares may be sold as part of a block trade with other Participants in the Plan in which all participants receive an average price; (c) the applicable Participant will be responsible for all broker's fees and other costs of sale, and by accepting an Award, each Participant agrees to indemnify and hold the Company harmless from any losses, costs, damages, or expenses relating to any such sale; (d) to the extent the Company or its designee receives proceeds of such sale that exceed the amount owed, the Company will pay such excess in cash to the applicable Participant as soon as reasonably practicable; (e) the Company and its designees are under no obligation to arrange for such sale at any particular price; and (f) in the event the proceeds of such sale are insufficient to satisfy the Participant's applicable obligation, the Participant may be required to pay immediately upon demand to the Company or its designee an amount in cash sufficient to satisfy any remaining portion of the Participant's obligation.

11. **Definitions.**

As used in the Plan, the following words and phrases will have the following meanings:

(a) "**Administrator**" means the Board or a Committee to the extent that the Board's powers or authority under the Plan have been delegated to such Committee.

(b) "**Applicable Laws**" means the requirements relating to the administration of equity incentive plans under U.S. federal and state securities, tax and other applicable laws, rules and regulations, the applicable rules of any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws and rules of any foreign country or other jurisdiction where Awards are granted.

(c) "**Award**" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units or Other Stock or Cash Based Awards.

(d) "**Award Agreement**" means a written agreement evidencing an Award, which may be electronic, that contains such terms and conditions as the Administrator determines, consistent with and subject to the terms and conditions of the Plan.

(e) "**Board**" means the Board of Directors of the Company.

(f) “**Change in Control**” means and includes each of the following:

(i) A transaction or series of transactions (other than an offering of Common Stock to the general public through a registration statement filed with the Securities and Exchange Commission or a transaction or series of transactions that meets the requirements of clauses (A) and (B) of subsection (iii) below) whereby any “person” or related “group” of “persons” (as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act) (other than the Company, any of its Subsidiaries, an employee benefit plan maintained by the Company or any of its Subsidiaries or a “person” that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of securities of the Company possessing more than 50% of the total combined voting power of the Company’s securities outstanding immediately after such acquisition; or

(ii) During any period of two consecutive years, individuals who, at the beginning of such period, constitute the Board together with any new Director(s) (other than a Director designated by a person who shall have entered into an agreement with the Company to effect a transaction described in subsections (i) or (iii)) whose election by the Board or nomination for election by the Company’s stockholders was approved by a vote of at least two-thirds of the Directors then still in office who either were Directors at the beginning of the two-year period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; or

(iii) The consummation by the Company (whether directly involving the Company or indirectly involving the Company through one or more intermediaries) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or substantially all of the Company’s assets in any single transaction or series of related transactions or (z) the acquisition of assets or stock of another entity, in each case other than a transaction:

(A) which results in the Company’s voting securities outstanding immediately before the transaction continuing to represent (either by remaining outstanding or by being converted into voting securities of the Company or the person that, as a result of the transaction, controls, directly or indirectly, the Company or owns, directly or indirectly, all or substantially all of the Company’s assets or otherwise succeeds to the business of the Company (the Company or such person, the “**Successor Entity**”)) directly or indirectly, at least a majority of the combined voting power of the Successor Entity’s outstanding voting securities immediately after the transaction, and

(B) after which no person or group beneficially owns voting securities representing 50% or more of the combined voting power of the Successor Entity; provided, however, that no person or group shall be treated for purposes of this clause (B) as beneficially owning 50% or more of the combined voting power of the Successor Entity solely as a result of the voting power held in the Company prior to the consummation of the transaction.

Notwithstanding the foregoing, if a Change in Control constitutes a payment event with respect to any Award (or portion of any Award) that provides for the deferral of compensation that is subject to Section 409A, to the extent required to avoid the imposition of additional taxes under Section 409A, the transaction or event described in subsection (i), (ii) or (iii) with respect to such Award (or portion thereof) shall only constitute a Change in Control for purposes of the payment timing of such Award if such transaction also constitutes a “change in control event,” as defined in Treasury Regulation Section 1.409A-3(i)(5).

The Administrator shall have full and final authority, which shall be exercised in its discretion, to determine conclusively whether a Change in Control has occurred pursuant to the above definition, the

date of the occurrence of such Change in Control and any incidental matters relating thereto; provided that any exercise of authority in conjunction with a determination of whether a Change in Control is a “change in control event” as defined in Treasury Regulation Section 1.409A-3(i)(5) shall be consistent with such regulation.

(g) “**Code**” means the Internal Revenue Code of 1986, as amended, and the regulations issued thereunder.

(h) “**Committee**” means one or more committees or subcommittees of the Board, which may include one or more Company directors or executive officers, to the extent Applicable Laws permit. To the extent required to comply with the provisions of Rule 16b-3, it is intended that each member of the Committee will be, at the time the Committee takes any action with respect to an Award that is subject to Rule 16b-3, a “non-employee director” within the meaning of Rule 16b-3; however, a Committee member’s failure to qualify as a “non-employee director” within the meaning of Rule 16b-3 will not invalidate any Award granted by the Committee that is otherwise validly granted under the Plan.

(i) “**Common Stock**” means the common stock of the Company.

(j) “**Company**” means Seres Therapeutics, Inc., a Delaware corporation, or any successor.

(k) “**Consultant**” means any person, including any adviser, engaged by the Company or its parent or Subsidiary to render services to such entity if the consultant or adviser: (i) renders *bona fide* services to the Company; (ii) renders services not in connection with the offer or sale of securities in a capital-raising transaction and does not directly or indirectly promote or maintain a market for the Company’s securities; and (iii) is a natural person.

(l) “**Designated Beneficiary**” means the beneficiary or beneficiaries the Participant designates, in a manner the Administrator determines, to receive amounts due or exercise the Participant’s rights if the Participant dies or becomes incapacitated. Without a Participant’s effective designation, “Designated Beneficiary” will mean the Participant’s estate.

(m) “**Director**” means a Board member.

(n) “**Disability**” means a permanent and total disability under Section 22(e)(3) of the Code, as amended.

(o) “**Dividend Equivalents**” means a right granted to a Participant under the Plan to receive the equivalent value (in cash or Shares) of dividends paid on Shares.

(p) “**Employee**” means any employee of the Company or its Subsidiaries.

(q) “**Equity Restructuring**” means a nonreciprocal transaction between the Company and its stockholders, such as a stock dividend, stock split, spin-off or recapitalization through a large, nonrecurring cash dividend, that affects the number or kind of Shares (or other Company securities) or the share price of Common Stock (or other Company securities) and causes a change in the per share value of the Common Stock underlying outstanding Awards.

(r) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

(s) “**Fair Market Value**” means, as of any date, the value of Common Stock determined as follows: (i) if the Common Stock is listed on any established stock exchange, its Fair Market Value will

be the closing sales price for such Common Stock as quoted on such exchange for such date, or if no sale occurred on such date, the last day preceding such date during which a sale occurred, as reported in *The Wall Street Journal* or another source the Administrator deems reliable; (ii) if the Common Stock is not traded on a stock exchange but is quoted on a national market or other quotation system, the closing sales price on such date, or if no sales occurred on such date, then on the last date preceding such date during which a sale occurred, as reported in *The Wall Street Journal* or another source the Administrator deems reliable; or (iii) without an established market for the Common Stock, the Administrator will determine the Fair Market Value in its discretion.

(t) “**Greater Than 10% Stockholder**” means an individual then owning (within the meaning of Section 424(d) of the Code) more than 10% of the total combined voting power of all classes of stock of the Company or its parent or subsidiary corporation, as defined in Section 424(e) and (f) of the Code, respectively.

(u) “**Incentive Stock Option**” means an Option intended to qualify as an “incentive stock option” as defined in Section 422 of the Code.

(v) “**Non-Qualified Stock Option**” means an Option not intended or not qualifying as an Incentive Stock Option.

(w) “**Option**” means an option to purchase Shares.

(x) “**Other Stock or Cash Based Awards**” means cash awards, awards of Shares, and other awards valued wholly or partially by referring to, or are otherwise based on, Shares or other property.

(y) “**Overall Share Limit**” means the sum of (i) [] Shares; (ii) any shares of Common Stock which are subject to Prior Plan Awards which become available for issuance under the Plan pursuant to Section 4(b) and (iii) an annual increase on the first day of each calendar year beginning January 1, 2016 and ending on and including January 1, 2025, equal to the lesser of (A) 4% of the aggregate number of shares of Common Stock outstanding on the final day of the immediately preceding calendar year and (B) such smaller number of Shares as is determined by the Board.

(z) “**Participant**” means a Service Provider who has been granted an Award.

(aa) “**Performance Criteria**” mean the criteria (and adjustments) that the Administrator may select for an Award to establish performance goals for a performance period, which may include the following: net earnings or losses (either before or after one or more of interest, taxes, depreciation, amortization, and non-cash equity-based compensation expense); gross or net sales or revenue or sales or revenue growth; net income (either before or after taxes) or adjusted net income; profits (including but not limited to gross profits, net profits, profit growth, net operation profit or economic profit), profit return ratios or operating margin; budget or operating earnings (either before or after taxes or before or after allocation of corporate overhead and bonus); cash flow (including operating cash flow and free cash flow or cash flow return on capital); return on assets; return on capital or invested capital; cost of capital; return on stockholders’ equity; total stockholder return; return on sales; costs, reductions in costs and cost control measures; expenses; working capital; earnings or loss per share; adjusted earnings or loss per share; price per share or dividends per share (or appreciation in or maintenance of such price or dividends); regulatory achievements or compliance; implementation, completion or attainment of objectives relating to research, development, regulatory, commercial, or strategic milestones or developments; market share; economic value or economic value added models; division, group or corporate financial goals; customer satisfaction/growth; customer service; employee satisfaction; recruitment and maintenance of personnel; human resources management; supervision of litigation and

other legal matters; strategic partnerships and transactions; financial ratios (including those measuring liquidity, activity, profitability or leverage); debt levels or reductions; sales-related goals; financing and other capital raising transactions; cash on hand; acquisition activity; investment sourcing activity; and marketing initiatives, any of which may be measured in absolute terms or as compared to any incremental increase or decrease, peer group results, or market performance indicators or indices.

(bb) “**Plan**” means this 2015 Incentive Award Plan.

(cc) “**Prior Plans**” means, collectively, the Seres Health, Inc. 2012 Stock Incentive Plan and any prior equity incentive plans of the Company or its predecessor.

(dd) “**Prior Plan Award**” means an award outstanding under the Prior Plans as of the Plan’s effective date in Section 10(c).

(ee) “**Public Trading Date**” means the first date upon which the Common Stock is listed (or approved for listing) upon notice of issuance on any securities exchange or designated (or approved for designation) upon notice of issuance as a national market security on an interdealer quotation system, or, if earlier, the date on which the Company becomes a “publicly held corporation” for purposes of Treasury Regulation Section 1.162-27(c)(1).

(ff) “**Restricted Stock**” means Shares awarded to a Participant under Section 6 subject to certain vesting conditions and other restrictions.

(gg) “**Restricted Stock Unit**” means an unfunded, unsecured right to receive, on the applicable settlement date, one Share or an amount in cash or other consideration determined by the Administrator to be of equal value as of such settlement date, subject to certain vesting conditions and other restrictions.

(hh) “**Rule 16b-3**” means Rule 16b-3 promulgated under the Exchange Act.

(ii) “**Section 409A**” means Section 409A of the Code and all regulations, guidance, compliance programs and other interpretative authority thereunder.

(jj) “**Securities Act**” means the Securities Act of 1933, as amended.

(kk) “**Service Provider**” means an Employee, Consultant or Director.

(ll) “**Shares**” means shares of Common Stock.

(mm) “**Stock Appreciation Right**” means a stock appreciation right granted under Section 5.

(nn) “**Subsidiary**” means any entity (other than the Company), whether domestic or foreign, in an unbroken chain of entities beginning with the Company if each of the entities other than the last entity in the unbroken chain beneficially owns, at the time of the determination, securities or interests representing at least 50% of the total combined voting power of all classes of securities or interests in one of the other entities in such chain.

(oo) “**Termination of Service**” means the date the Participant ceases to be a Service Provider.

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**SERES THERAPEUTICS, INC.
2015 INCENTIVE AWARD PLAN**

STOCK OPTION GRANT NOTICE

Capitalized terms not specifically defined in this Stock Option Grant Notice (the “**Grant Notice**”) have the meanings given to them in the 2015 Incentive Award Plan (as amended from time to time, the “**Plan**”) of Seres Therapeutics, Inc. (the “**Company**”).

The Company hereby grants to the participant listed below (“**Participant**”) the stock option described in this Grant Notice (the “**Option**”), subject to the terms and conditions of the Plan and the Stock Option Agreement attached hereto as **Exhibit A** (the “**Agreement**”), both of which are incorporated into this Grant Notice by reference.

Participant:

Grant Date:

Exercise Price per Share:

Shares Subject to the Option:

Final Expiration Date:

Vesting Commencement Date:

Vesting Schedule: [To be specified in individual award agreements]

Type of Option Incentive Stock Option Non-Qualified Stock Option

By Participant’s signature below, Participant agrees to be bound by the terms of this Grant Notice, the Plan and the Agreement. Participant has reviewed the Plan, this Grant Notice and the Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Grant Notice and fully understands all provisions of the Plan, this Grant Notice and the Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan, this Grant Notice or the Agreement.

SERES THERAPEUTICS, INC.

PARTICIPANT

By: _____
Print Name: _____
Title: _____

By: _____
Print Name: _____

STOCK OPTION AGREEMENT

Capitalized terms not specifically defined in this Agreement have the meanings specified in the Grant Notice or, if not defined in the Grant Notice, in the Plan.

ARTICLE I. GENERAL

1.1 Grant of Option. Pursuant to the Grant Notice to which this Agreement is attached, the Company has granted to Participant the Option effective as of the grant date set forth in the Grant Notice (the “**Grant Date**”).

1.2 Incorporation of Terms of Plan. The Option is subject to the terms and conditions set forth in this Agreement and the Plan, which is incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan will control.

ARTICLE II. PERIOD OF EXERCISABILITY

2.1 Commencement of Exercisability. The Option will vest and become exercisable according to the vesting schedule in the Grant Notice (the “**Vesting Schedule**”) except that any fraction of a Share as to which the Option would be vested or exercisable will be accumulated and will vest and become exercisable only when a whole Share has accumulated. Notwithstanding anything in the Grant Notice, the Plan or this Agreement to the contrary, unless the Administrator otherwise determines, the Option will immediately expire and be forfeited as to any portion that is not vested and exercisable as of Participant’s Termination of Service for any reason.

2.2 Duration of Exercisability. The Vesting Schedule is cumulative. Any portion of the Option which vests and becomes exercisable will remain vested and exercisable until the Option expires. The Option will be forfeited immediately upon its expiration.

2.3 Expiration of Option. The Option may not be exercised to any extent by anyone after, and will expire on, the first of the following to occur:

(a) The final expiration date in the Grant Notice;

(b) Except as the Administrator may otherwise approve, the expiration of three (3) months from the date of Participant’s Termination of Service, unless Participant’s Termination of Service is for Cause or by reason of Participant’s death or Disability;

(c) Except as the Administrator may otherwise approve, the expiration of one (1) year from the date of Participant’s Termination of Service by reason of Participant’s death or Disability; and

(d) Except as the Administrator may otherwise approve, Participant’s Termination of Service for Cause.

As used in this Agreement, “**Cause**” means (i) if Participant is a party to a written employment or consulting agreement with the Company or its Subsidiary in which the term “cause” is defined (a “**Relevant Agreement**”), “Cause” as defined in the Relevant Agreement, and (ii) if no Relevant Agreement exists, (A) the Administrator’s determination that Participant failed to substantially perform

Participant's duties (other than a failure resulting from Participant's Disability); (B) the Administrator's determination that Participant failed to carry out, or comply with any lawful and reasonable directive of the Board or Participant's immediate supervisor; (C) Participant's conviction, plea of no contest, plea of nolo contendere, or imposition of unadjudicated probation for any felony or indictable offense or crime involving moral turpitude; (D) Participant's unlawful use (including being under the influence) or possession of illegal drugs on the premises of the Company or any of its Subsidiaries or while performing Participant's duties and responsibilities for the Company or any of its Subsidiaries; or (E) Participant's commission of an act of fraud, embezzlement, misappropriation, misconduct, or breach of fiduciary duty against the Company or any of its Subsidiaries.

ARTICLE III. EXERCISE OF OPTION

3.1 Person Eligible to Exercise. During Participant's lifetime, only Participant may exercise the Option. After Participant's death, any exercisable portion of the Option may, prior to the time the Option expires, be exercised by Participant's Designated Beneficiary as provided in the Plan.

3.2 Partial Exercise. Any exercisable portion of the Option or the entire Option, if then wholly exercisable, may be exercised, in whole or in part, according to the procedures in the Plan at any time prior to the time the Option or portion thereof expires, except that the Option may only be exercised for whole Shares.

3.3 Tax Withholding.

(a) The Company has the right and option, but not the obligation, to treat Participant's failure to provide timely payment in accordance with the Plan of any withholding tax arising in connection with the Option as Participant's election to satisfy all or any portion of the withholding tax by requesting the Company retain Shares otherwise issuable under the Option.

(b) Participant acknowledges that Participant is ultimately liable and responsible for all taxes owed in connection with the Option, regardless of any action the Company or any Subsidiary takes with respect to any tax withholding obligations that arise in connection with the Option. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding, vesting or exercise of the Option or the subsequent sale of Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure the Option to reduce or eliminate Participant's tax liability.

ARTICLE IV. OTHER PROVISIONS

4.1 Adjustments. Participant acknowledges that the Option is subject to adjustment, modification and termination in certain events as provided in this Agreement and the Plan.

4.2 Notices. Any notice to be given under the terms of this Agreement to the Company must be in writing and addressed to the Company in care of the Company's Secretary at the Company's principal office or the Secretary's then-current email address or facsimile number. Any notice to be given under the terms of this Agreement to Participant must be in writing and addressed to Participant (or, if Participant is then deceased, to the person entitled to exercise the Option) at Participant's last known mailing address, email address or facsimile number in the Company's personnel files. By a notice given pursuant to this Section, either party may designate a different address for notices to be given to that party. Any notice will be deemed duly given when actually received, when sent by email, when sent by

certified mail (return receipt requested) and deposited with postage prepaid in a post office or branch post office regularly maintained by the United States Postal Service, when delivered by a nationally recognized express shipping company or upon receipt of a facsimile transmission confirmation.

4.3 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

4.4 Conformity to Securities Laws. Participant acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all Applicable Laws and, to the extent Applicable Laws permit, will be deemed amended as necessary to conform to Applicable Laws.

4.5 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement will inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in the Plan, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

4.6 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if Participant is subject to Section 16 of the Exchange Act, the Plan, the Grant Notice, this Agreement and the Option will be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3) that are requirements for the application of such exemptive rule. To the extent Applicable Laws permit, this Agreement will be deemed amended as necessary to conform to such applicable exemptive rule.

4.7 Entire Agreement. The Plan, the Grant Notice and this Agreement (including any exhibit hereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

4.8 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held illegal or invalid, the provision will be severable from, and the illegality or invalidity of the provision will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

4.9 Limitation on Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Agreement creates only a contractual obligation on the part of the Company as to amounts payable and may not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. Participant will have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the Option, and rights no greater than the right to receive the Shares as a general unsecured creditor with respect to the Option, as and when exercised pursuant to the terms hereof.

4.10 Not a Contract of Employment. Nothing in the Plan, the Grant Notice or this Agreement confers upon Participant any right to continue in the employ or service of the Company or any Subsidiary or interferes with or restricts in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Participant at any time for any reason whatsoever, with or without Cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Participant.

4.11 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to Applicable Law, each of which will be deemed an original and all of which together will constitute one instrument.

4.12 Incentive Stock Options. If the Option is designated as an Incentive Stock Option:

(a) Participant acknowledges that to the extent the aggregate fair market value of shares (determined as of the time the option with respect to the shares is granted) with respect to which stock options intended to qualify as “incentive stock options” under Section 422 of the Code, including the Option, are exercisable for the first time by Participant during any calendar year exceeds \$100,000 or if for any other reason such stock options do not qualify or cease to qualify for treatment as “incentive stock options” under Section 422 of the Code, such stock options (including the Option) will be treated as non-qualified stock options. Participant further acknowledges that the rule set forth in the preceding sentence will be applied by taking the Option and other stock options into account in the order in which they were granted, as determined under Section 422(d) of the Code. Participant also acknowledges that if the Option is exercised more than three (3) months after Participant’s Termination of Service, other than by reason of death or disability, the Option will be taxed as a Non-Qualified Stock Option.

(b) Participant will give prompt written notice to the Company of any disposition or other transfer of any Shares acquired under this Agreement if such disposition or other transfer is made (a) within two (2) years from the Grant Date or (b) within one (1) year after the transfer of such Shares to Participant. Such notice will specify the date of such disposition or other transfer and the amount realized, in cash, other property, assumption of indebtedness or other consideration, by Participant in such disposition or other transfer.

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**SERES THERAPEUTICS, INC.
2015 INCENTIVE AWARD PLAN**

RESTRICTED STOCK GRANT NOTICE

Capitalized terms not specifically defined in this Restricted Stock Grant Notice (the “**Grant Notice**”) have the meanings given to them in the 2015 Incentive Award Plan (as amended from time to time, the “**Plan**”) of Seres Therapeutics, Inc. (the “**Company**”).

The Company has granted to the participant listed below (“**Participant**”) the shares of Restricted Stock described in this Grant Notice (the “**Restricted Shares**”), subject to the terms and conditions of the Plan and the Restricted Stock Agreement attached as **Exhibit A** (the “**Agreement**”), both of which are incorporated into this Grant Notice by reference.

Participant:

Grant Date:

Number of Restricted Shares:

Vesting Commencement Date:

Vesting Schedule:

[To be specified in individual award agreements]

By Participant’s signature below, Participant agrees to be bound by the terms of this Grant Notice, the Plan and the Agreement. Participant has reviewed the Plan, this Grant Notice and the Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Grant Notice and fully understands all provisions of the Plan, this Grant Notice and the Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan, this Grant Notice or the Agreement.

SERES THERAPEUTICS, INC.

PARTICIPANT

By: _____
Print Name: _____
Title: _____

By: _____
Print Name: _____

RESTRICTED STOCK AGREEMENT

Capitalized terms not specifically defined in this Agreement have the meanings specified in the Grant Notice or, if not defined in the Grant Notice, in the Plan.

ARTICLE I. GENERAL

1.1 Issuance of Restricted Shares. The Company will issue the Restricted Shares to the Participant effective as of the grant date set forth in the Grant Notice and will cause (a) a stock certificate or certificates representing the Restricted Shares to be registered in Participant's name or (b) the Restricted Shares to be held in book-entry form. If a stock certificate is issued, the certificate will be delivered to, and held in accordance with this Agreement by, the Company or its authorized representatives and will bear the restrictive legends required by this Agreement. If the Restricted Shares are held in book-entry form, then the book-entry will indicate that the Restricted Shares are subject to the restrictions of this Agreement.

1.2 Incorporation of Terms of Plan. The Restricted Shares are subject to the terms and conditions set forth in this Agreement and the Plan, which is incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan will control.

ARTICLE II. VESTING, FORFEITURE AND ESCROW

2.1 Vesting. The Restricted Shares will become vested Shares (the "**Vested Shares**") according to the vesting schedule in the Grant Notice except that any fraction of a Share that would otherwise become a Vested Share will be accumulated and will become a Vested Share only when a whole Vested Share has accumulated.

2.2 Forfeiture. In the event of Participant's Termination of Service for any reason, Participant will immediately and automatically forfeit to the Company any Shares that are not Vested Shares (the "**Unvested Shares**") at the time of Participant's Termination of Service, except as otherwise determined by the Administrator or provided in a binding written agreement between Participant and the Company. Upon forfeiture of Unvested Shares, the Company will become the legal and beneficial owner of the Unvested Shares and all related interests and Participant will have no further rights with respect to the Unvested Shares.

2.3 Escrow.

(a) Unvested Shares will be held by the Company or its authorized representatives until (i) they are forfeited, (ii) they become Vested Shares or (iii) this Agreement is no longer in effect. By accepting this Award, Participant appoints the Company and its authorized representatives as Participant's attorney(s)-in-fact to take all actions necessary to effect any transfer of forfeited Unvested Shares (and Retained Distributions (as defined below), if any, paid on such forfeited Unvested Shares) to the Company as may be required pursuant to the Plan or this Agreement and to execute such representations or other documents or assurances as the Company or such representatives deem necessary or advisable in connection with any such transfer. The Company, or its authorized representative, will not be liable for any good faith act or omission with respect to the holding in escrow or transfer of the Restricted Shares.

(b) All cash dividends and other distributions made or declared with respect to

Unvested Shares (“**Retained Distributions**”) will be held by the Company until the time (if ever) when the Unvested Shares to which such Retained Distributions relate become Vested Shares. The Company will establish a separate Retained Distribution bookkeeping account (“**Retained Distribution Account**”) for each Unvested Share with respect to which Retained Distributions have been made or declared in cash and credit the Retained Distribution Account (without interest) on the date of payment with the amount of such cash made or declared with respect to the Unvested Share. Retained Distributions (including any Retained Distribution Account balance) will immediately and automatically be forfeited upon forfeiture of the Unvested Share with respect to which the Retained Distributions were paid or declared.

(c) As soon as reasonably practicable following the date on which an Unvested Share becomes a Vested Share, the Company will (i) cause the certificate (or a new certificate without the legend required by this Agreement, if Participant so requests) representing the Share to be delivered to Participant or, if the Share is held in book-entry form, cause the notations indicating the Share is subject to the restrictions of this Agreement to be removed and (ii) pay to Participant the Retained Distributions relating to the Share.

2.4 Rights as Stockholder. Except as otherwise provided in this Agreement or the Plan, upon issuance of the Restricted Shares by the Company, Participant will have all the rights of a stockholder with respect to the Restricted Shares, including the right to vote the Restricted Shares and to receive dividends or other distributions paid or made with respect to the Restricted Shares.

ARTICLE III. TAXATION AND TAX WITHHOLDING

3.1 Representation. Participant represents to the Company that Participant has reviewed with Participant’s own tax advisors the tax consequences of the Restricted Shares and the transactions contemplated by the Grant Notice and this Agreement. Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents.

3.2 Section 83(b) Election. If Participant makes an election under Section 83(b) of the Code with respect to the Restricted Shares, Participant will deliver a copy of the election to the Company promptly after filing the election with the Internal Revenue Service.

3.3 Tax Withholding.

(a) The Company has the right and option, but not the obligation, to treat Participant’s failure to provide timely payment in accordance with the Plan of any withholding tax arising in connection with the Restricted Shares as Participant’s election to satisfy all or any portion of the withholding tax by requesting the Company retain Shares otherwise deliverable under the Award.

(b) Participant acknowledges that Participant is ultimately liable and responsible for all taxes owed in connection with the Restricted Shares, regardless of any action the Company or any Subsidiary takes with respect to any tax withholding obligations that arise in connection with the Restricted Shares. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding, vesting or payment of the Restricted Shares or the subsequent sale of the Restricted Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure this Award to reduce or eliminate Participant’s tax liability.

**ARTICLE IV.
RESTRICTIVE LEGENDS AND TRANSFERABILITY**

4.1 Legends. Any certificate representing a Restricted Share will bear the following legend until the Restricted Share becomes a Vested Share:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO FORFEITURE IN FAVOR OF THE COMPANY AND MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF A RESTRICTED STOCK AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

4.2 Transferability. The Restricted Shares and any Retained Distributions are subject to the restrictions on transfer in the Plan and may not be sold, assigned or transferred in any manner unless and until they become Vested Shares. Any attempted transfer or disposition of Unvested Shares or related Retained Distributions prior to the time the Unvested Shares become Vested Shares will be null and void. The Company will not be required to (a) transfer on its books any Restricted Share that has been sold or otherwise transferred in violation of this Agreement or (b) treat as owner of such Restricted Share or accord the right to vote or pay dividends to any purchaser or other transferee to whom such Restricted Share has been so transferred. The Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, or make appropriate notations to the same effect in its records.

**ARTICLE V.
OTHER PROVISIONS**

5.1 Adjustments. Participant acknowledges that the Restricted Shares are subject to adjustment, modification and termination in certain events as provided in this Agreement and the Plan.

5.2 Notices. Any notice to be given under the terms of this Agreement to the Company must be in writing and addressed to the Company in care of the Company's Secretary at the Company's principal office or the Secretary's then-current email address or facsimile number. Any notice to be given under the terms of this Agreement to Participant must be in writing and addressed to Participant at Participant's last known mailing address, email address or facsimile number in the Company's personnel files. By a notice given pursuant to this Section, either party may designate a different address for notices to be given to that party. Any notice will be deemed duly given when actually received, when sent by email, when sent by certified mail (return receipt requested) and deposited with postage prepaid in a post office or branch post office regularly maintained by the United States Postal Service, when delivered by a nationally recognized express shipping company or upon receipt of a facsimile transmission confirmation.

5.3 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

5.4 Conformity to Securities Laws. Participant acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all Applicable Laws and, to the extent Applicable Laws permit, will be deemed amended as necessary to conform to Applicable Laws.

5.5 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement will inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in this Agreement or the Plan, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

5.6 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if Participant is subject to Section 16 of the Exchange Act, the Plan, the Grant Notice, this Agreement and the Restricted Shares will be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3) that are requirements for the application of such exemptive rule. To the extent Applicable Laws permit, this Agreement will be deemed amended as necessary to conform to such applicable exemptive rule.

5.7 Entire Agreement. The Plan, the Grant Notice and this Agreement (including any exhibit hereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

5.8 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held illegal or invalid, the provision will be severable from, and the illegality or invalidity of the provision will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

5.9 Limitation on Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Agreement creates only a contractual obligation on the part of the Company as to amounts payable and may not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. Participant will have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the Award.

5.10 Not a Contract of Employment. Nothing in the Plan, the Grant Notice or this Agreement confers upon Participant any right to continue in the employ or service of the Company or any Subsidiary or interferes with or restricts in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Participant at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Participant.

5.11 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to Applicable Law, each of which will be deemed an original and all of which together will constitute one instrument.

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**SERES THERAPEUTICS, INC.
2015 INCENTIVE AWARD PLAN**

RESTRICTED STOCK UNIT GRANT NOTICE

Capitalized terms not specifically defined in this Restricted Stock Unit Grant Notice (the “**Grant Notice**”) have the meanings given to them in the 2015 Incentive Award Plan (as amended from time to time, the “**Plan**”) of Seres Therapeutics, Inc. (the “**Company**”).

The Company hereby grants to the participant listed below (“**Participant**”) the Restricted Stock Units described in this Grant Notice (the “**RSUs**”), subject to the terms and conditions of the Plan and the Restricted Stock Unit Agreement attached hereto as **Exhibit A** (the “**Agreement**”), both of which are incorporated into this Grant Notice by reference.

Participant:

Grant Date:

Number of RSUs:

Vesting Commencement Date:

Vesting Schedule:

[To be specified in individual award agreements]

By Participant’s signature below, Participant agrees to be bound by the terms of this Grant Notice, the Plan and the Agreement. Participant has reviewed the Plan, this Grant Notice and the Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Grant Notice and fully understands all provisions of the Plan, this Grant Notice and the Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan, this Grant Notice or the Agreement.

SERES THERAPEUTICS, INC.

PARTICIPANT

By: _____
Print Name: _____
Title: _____

By: _____
Print Name: _____

RESTRICTED STOCK UNIT AGREEMENT

Capitalized terms not specifically defined in this Agreement have the meanings specified in the Grant Notice or, if not defined in the Grant Notice, in the Plan.

Article I. GENERAL

1.1 Award of RSUs and Dividend Equivalents.

(a) The Company has granted the RSUs to Participant effective as of the grant date set forth in the Grant Notice (the “**Grant Date**”). Each RSU represents the right to receive one Share or, at the option of the Company, an amount of cash, in either case, as set forth in this Agreement. Participant will have no right to the distribution of any Shares or payment of any cash until the time (if ever) the RSUs have vested.

(b) The Company hereby grants to Participant, with respect to each RSU, a Dividend Equivalent for ordinary cash dividends paid to substantially all holders of outstanding Shares with a record date after the Grant Date and prior to the date the applicable RSU is settled, forfeited or otherwise expires. Each Dividend Equivalent entitles Participant to receive the equivalent value of any such ordinary cash dividends paid on a single Share. The Company will establish a separate Dividend Equivalent bookkeeping account (a “**Dividend Equivalent Account**”) for each Dividend Equivalent and credit the Dividend Equivalent Account (without interest) on the applicable dividend payment date with the amount of any such cash paid.

1.2 Incorporation of Terms of Plan. The RSUs are subject to the terms and conditions set forth in this Agreement and the Plan, which is incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan will control.

1.3 Unsecured Promise. The RSUs and Dividend Equivalents will at all times prior to settlement represent an unsecured Company obligation payable only from the Company’s general assets.

Article II. VESTING; FORFEITURE AND SETTLEMENT

2.1 Vesting; Forfeiture. The RSUs will vest according to the vesting schedule in the Grant Notice except that any fraction of an RSU that would otherwise be vested will be accumulated and will vest only when a whole RSU has accumulated. In the event of Participant’s Termination of Service for any reason, all unvested RSUs will immediately and automatically be cancelled and forfeited, except as otherwise determined by the Administrator or provided in a binding written agreement between Participant and the Company. Dividend Equivalents (including any Dividend Equivalent Account balance) will vest or be forfeited, as applicable, upon the vesting or forfeiture of the RSU with respect to which the Dividend Equivalent (including the Dividend Equivalent Account) relates.

2.2 Settlement.

(a) RSUs and Dividend Equivalents (including any Dividend Equivalent Account balance) will be paid in Shares or cash at the Company’s option as soon as administratively practicable after the vesting of the applicable RSU, but in no event more than sixty (60) days after the RSU’s vesting date. Notwithstanding the foregoing, the Company may delay any payment under this Agreement that the Company reasonably determines would violate Applicable Law until the earliest date the Company

reasonably determines the making of the payment will not cause such a violation (in accordance with Treasury Regulation Section 1.409A-2(b)(7)(ii)), provided the Company reasonably believes the delay will not result in the imposition of excise taxes under Section 409A.

(b) If an RSU is paid in cash, the amount of cash paid with respect to the RSU will equal the Fair Market Value of a Share on the day immediately preceding the payment date. If a Dividend Equivalent is paid in Shares, the number of Shares paid with respect to the Dividend Equivalent will equal the quotient, rounded down to the nearest whole Share, of the Dividend Equivalent Account balance divided by the Fair Market Value of a Share on the day immediately preceding the payment date.

Article III.
TAXATION AND TAX WITHHOLDING

3.1 Representation. Participant represents to the Company that Participant has reviewed with Participant's own tax advisors the tax consequences of this Award and the transactions contemplated by the Grant Notice and this Agreement. Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents.

3.2 Tax Withholding.

(a) The Company has the right and option, but not the obligation, to treat Participant's failure to provide timely payment in accordance with the Plan of any withholding tax arising in connection with the RSUs or Dividend Equivalents as Participant's election to satisfy all or any portion of the withholding tax by requesting the Company retain Shares otherwise issuable under the Award.

(b) Participant acknowledges that Participant is ultimately liable and responsible for all taxes owed in connection with the RSUs and the Dividend Equivalents, regardless of any action the Company or any Subsidiary takes with respect to any tax withholding obligations that arise in connection with the RSUs or Dividend Equivalents. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding, vesting or payment of the RSUs or the Dividend Equivalents or the subsequent sale of Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure the RSUs or Dividend Equivalents to reduce or eliminate Participant's tax liability.

Article IV.
OTHER PROVISIONS

4.1 Adjustments. Participant acknowledges that the RSUs, the Shares subject to the RSUs and the Dividend Equivalents are subject to adjustment, modification and termination in certain events as provided in this Agreement and the Plan.

4.2 Notices. Any notice to be given under the terms of this Agreement to the Company must be in writing and addressed to the Company in care of the Company's Secretary at the Company's principal office or the Secretary's then-current email address or facsimile number. Any notice to be given under the terms of this Agreement to Participant must be in writing and addressed to Participant at Participant's last known mailing address, email address or facsimile number in the Company's personnel files. By a notice given pursuant to this Section, either party may designate a different address for notices to be given to that party. Any notice will be deemed duly given when actually received, when sent by email, when sent by certified mail (return receipt requested) and deposited with postage prepaid in a post office or branch post office regularly maintained by the United States Postal Service, when delivered by a nationally recognized express shipping company or upon receipt of a facsimile transmission confirmation.

4.3 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

4.4 Conformity to Securities Laws. Participant acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all Applicable Laws and, to the extent Applicable Laws permit, will be deemed amended as necessary to conform to Applicable Laws.

4.5 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement will inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in the Plan, this Agreement will be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

4.6 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if Participant is subject to Section 16 of the Exchange Act, the Plan, the Grant Notice, this Agreement, the RSUs and the Dividend Equivalents will be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3) that are requirements for the application of such exemptive rule. To the extent Applicable Laws permit, this Agreement will be deemed amended as necessary to conform to such applicable exemptive rule.

4.7 Entire Agreement. The Plan, the Grant Notice and this Agreement (including any exhibit hereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

4.8 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held illegal or invalid, the provision will be severable from, and the illegality or invalidity of the provision will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

4.9 Limitation on Participant's Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Agreement creates only a contractual obligation on the part of the Company as to amounts payable and may not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. Participant will have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the RSUs and Dividend Equivalents, and rights no greater than the right to receive cash or the Shares as a general unsecured creditor with respect to the RSUs and Dividend Equivalents, as and when settled pursuant to the terms of this Agreement.

4.10 Not a Contract of Employment. Nothing in the Plan, the Grant Notice or this Agreement confers upon Participant any right to continue in the employ or service of the Company or any Subsidiary or interferes with or restricts in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Participant at any time for any reason whatsoever, with or without Cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Participant.

4.11 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to Applicable Law, each of which will be deemed an original and all of which together will constitute one instrument.

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SERES THERAPEUTICS, INC.

2015 EMPLOYEE STOCK PURCHASE PLAN

1. **Purpose.**

The purposes of this Seres Therapeutics, Inc. 2015 Employee Stock Purchase Plan (as it may be amended or restated from time to time, the “**Plan**”) are to assist Eligible Employees of Seres Therapeutics, Inc., a Delaware corporation (the “**Company**”), and its Designated Subsidiaries in acquiring a stock ownership interest in the Company pursuant to a plan which is intended to qualify as an “employee stock purchase plan” within the meaning of Section 423(b) of the Code, and to help Eligible Employees provide for their future security and to encourage them to remain in the employment of the Company and its Designated Subsidiaries.

2. **Definitions and Construction.**

Wherever the following terms are used in the Plan they shall have the meanings specified below, unless the context clearly indicates otherwise. The singular pronoun shall include the plural where the context so indicates. Masculine, feminine and neuter pronouns are used interchangeably and each comprehends the others.

(a) “**Administrator**” shall mean the entity that conducts the general administration of the Plan as provided in Section 11. The term “Administrator” shall refer to the Committee unless the Board has assumed the authority for administration of the Plan as provided in Section 11.

(b) “**Applicable Laws**” shall mean the requirements relating to the administration of employee stock purchase plans (within the meaning of Section 423(b) of the Code) under U.S. federal and state securities, tax and other applicable laws, rules and regulations, the applicable rules of any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws and rules of any foreign country or other jurisdiction where rights under this Plan are granted.

(c) “**Board**” shall mean the Board of Directors of the Company.

(d) “**Change in Control**” shall mean and include each of the following:

(i) A transaction or series of transactions (other than an offering of Common Stock to the general public through a registration statement filed with the Securities and Exchange Commission or a transaction or series of transactions that meets the requirements of clauses (A) and (B) of Section 2(d)(iii) below whereby any “person” or related “group” of “persons” (as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act) (other than the Company, any of its Subsidiaries, an employee benefit plan maintained by the Company or any of its Subsidiaries or a “person” that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, the Company) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of securities of the Company possessing more than 50% of the total combined voting power of the Company’s securities outstanding immediately after such acquisition; or

(ii) During any period of two consecutive years, individuals who, at the beginning of such period, constitute the Board together with any new director(s) (other than a director designated by a person who shall have entered into an agreement with the Company to effect a transaction described in Section 2(d)(i) or 2(d)(iii)) whose election by the Board or nomination for election by the Company’s stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the two-year period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; or

(iii) The consummation by the Company (whether directly involving the Company or indirectly involving the Company through one or more intermediaries) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or substantially all of the Company's assets in any single transaction or series of related transactions or (z) the acquisition of assets or stock of another entity, in each case other than a transaction:

(A) which results in the Company's voting securities outstanding immediately before the transaction continuing to represent (either by remaining outstanding or by being converted into voting securities of the Company or the person that, as a result of the transaction, controls, directly or indirectly, the Company or owns, directly or indirectly, all or substantially all of the Company's assets or otherwise succeeds to the business of the Company (the Company or such person, the "**Successor Entity**")) directly or indirectly, at least a majority of the combined voting power of the Successor Entity's outstanding voting securities immediately after the transaction, and

(B) after which no person or group beneficially owns voting securities representing 50% or more of the combined voting power of the Successor Entity; provided, however, that no person or group shall be treated for purposes of this Section 2(d)(iii)(B) as beneficially owning 50% or more of the combined voting power of the Successor Entity solely as a result of the voting power held in the Company prior to the consummation of the transaction.

The Administrator shall have full and final authority, which shall be exercised in its discretion, to determine conclusively whether a Change in Control has occurred pursuant to the above definition, the date of the occurrence of such Change in Control and any incidental matters relating thereto.

(e) "**Code**" shall mean the Internal Revenue Code of 1986, as amended from time to time, together with the regulations and official guidance promulgated thereunder.

(f) "**Common Stock**" shall mean the common stock of the Company and such other securities of the Company that may be substituted therefor pursuant to Section 8.

(g) "**Company**" shall mean Seres Therapeutics, Inc., a Delaware corporation.

(h) "**Compensation**" of an Eligible Employee shall mean the gross base compensation received by such Eligible Employee as compensation for services to the Company or any Designated Subsidiary, including overtime payments and excluding sales commissions, incentive compensation, bonuses, expense reimbursements, fringe benefits and other special payments.

(i) "**Designated Subsidiary**" shall mean any Subsidiary designated by the Administrator in accordance with Section 11(c)(ii).

(j) "**Effective Date**" shall mean the day prior to the Public Trading Date.

(k) "**Eligible Employee**" shall mean an Employee: (i) who does not, immediately after any rights under this Plan are granted, own (directly or through attribution) stock possessing 5% or more of the total combined voting power or value of all classes of Common Stock and other stock of the Company, a Parent or a Subsidiary (as determined under Section 423(b)(3) of the Code); (ii) whose

customary employment is for more than twenty hours per week; and (iii) whose customary employment is for more than five months in any calendar year. For purposes of the foregoing clause (i), the rules of Section 424(d) of the Code with regard to the attribution of stock ownership shall apply in determining the stock ownership of an individual, and stock that an Employee may purchase under outstanding options shall be treated as stock owned by the Employee; provided, however, that the Administrator may provide in an Offering Document that an Employee shall not be eligible to participate in an Offering Period if: (x) such Employee is a highly compensated employee within the meaning of Section 423(b)(4)(D) of the Code; and/or (y) such Employee has not met a service requirement designated by the Administrator pursuant to Section 423(b)(4)(A) of the Code (which service requirement may not exceed two years), and/or (z) such Employee is a citizen or resident of a foreign jurisdiction and the grant of a right to purchase Common Stock under the Plan to such Employee would be prohibited under the laws of such foreign jurisdiction or the grant of a right to purchase Common Stock under the Plan to such Employee in compliance with the laws of such foreign jurisdiction would cause the Plan to violate the requirements of Section 423 of the Code, as determined by the Administrator in its sole discretion; provided, further, that any exclusion in clauses (x), (y) or (z) shall be applied in an identical manner under each Offering Period to all Employees, in accordance with Treasury Regulation Section 1.423-2(e).

(l) “**Employee**” shall mean any officer or other employee (as defined in accordance with Section 3401(c) of the Code) of the Company or any Designated Subsidiary. “Employee” shall not include any director of the Company or a Designated Subsidiary who does not render services to the Company or a Designated Subsidiary as an employee within the meaning of Section 3401(c) of the Code. For purposes of the Plan, the employment relationship shall be treated as continuing intact while the individual is on sick leave or other leave of absence approved by the Company or Designated Subsidiary and meeting the requirements of Treasury Regulation Section 1.421-1(h)(2). Where the period of leave exceeds three (3) months and the individual’s right to reemployment is not guaranteed either by statute or by contract, the employment relationship shall be deemed to have terminated on the first day immediately following such three (3)-month period.

(m) “**Enrollment Date**” shall mean the first Trading Day of each Offering Period.

(n) “**Exchange Act**” shall mean the Securities Exchange Act of 1934, as amended from time to time.

(o) “**Fair Market Value**” means, as of any date, the value of Common Stock determined as follows: (i) if the Common Stock is listed on any established stock exchange, its Fair Market Value will be the closing sales price for such Common Stock as quoted on such exchange for such date, or if no sale occurred on such date, the last day preceding such date during which a sale occurred, as reported in The Wall Street Journal or another source the Administrator deems reliable; (ii) if the Common Stock is not traded on a stock exchange but is quoted on a national market or other quotation system, the closing sales price on such date, or if no sales occurred on such date, then on the last date preceding such date during which a sale occurred, as reported in The Wall Street Journal or another source the Administrator deems reliable; or (iii) without an established market for the Common Stock, the Administrator will determine the Fair Market Value in its discretion.

(p) “**Offering Document**” shall have the meaning given to such term in Section 4(a).

(q) “**Offering Period**” shall have the meaning given to such term in Section 4(a).

(r) “**Parent**” shall mean any corporation, other than the Company, in an unbroken chain of corporations ending with the Company if, at the time of the determination, each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

(s) “**Participant**” shall mean any Eligible Employee who has executed a subscription agreement and been granted rights to purchase Common Stock pursuant to the Plan.

(t) “**Plan**” shall mean this Seres Therapeutics, Inc. 2015 Employee Stock Purchase Plan, as it may be amended from time to time.

(u) “**Public Trading Date**” shall mean the first date upon which Common Stock is listed (or approved for listing) upon notice of issuance on any securities exchange or designated (or approved for designation) upon notice of issuance as a national market security on an interdealer quotation system.

(v) “**Purchase Date**” shall mean the last Trading Day of each Offering Period.

(w) “**Purchase Price**” shall mean the purchase price designated by the Administrator in the applicable Offering Document (which purchase price shall not be less than 85% of the Fair Market Value of a Share on the Enrollment Date or on the Purchase Date, whichever is lower); provided, however, that, in the event no purchase price is designated by the Administrator in the applicable Offering Document, the purchase price for the Offering Periods covered by such Offering Document shall be 85% of the Fair Market Value of a Share on the Enrollment Date or on the Purchase Date, whichever is lower; provided, further, that the Purchase Price may be adjusted by the Administrator pursuant to Section 8 and shall not be less than the par value of a Share.

(x) “**Securities Act**” shall mean the Securities Act of 1933, as amended from time to time.

(y) “**Share**” shall mean a share of Common Stock.

(z) “**Subsidiary**” shall mean any corporation, other than the Company, in an unbroken chain of corporations beginning with the Company if, at the time of the determination, each of the corporations other than the last corporation in an unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain; provided, however, that a limited liability company or partnership may be treated as a Subsidiary to the extent either (i) such entity is treated as a disregarded entity under Treasury Regulation Section 301.7701-3(a) by reason of the Company or any other Subsidiary that is a corporation being the sole owner of such entity, or (ii) such entity elects to be classified as a corporation under Treasury Regulation Section 301.7701-3(a) and such entity would otherwise qualify as a Subsidiary.

(aa) “**Trading Day**” shall mean a day on which national stock exchanges in the United States are open for trading.

3. **Shares Subject to the Plan.**

(a) *Number of Shares.* Subject to Section 8, the aggregate number of Shares that may be issued pursuant to rights granted under the Plan shall be [] Shares. In addition to the foregoing, subject to Section 8, on the first day of each calendar year beginning on January 1, 2016 and ending on and including January 1, 2025, the number of Shares available for issuance under the Plan shall be increased by that number of Shares equal to the least of (i) [] Shares, (ii) 1% of the Shares outstanding on the final day of the immediately preceding calendar year and (iii) such smaller number of Shares as determined by the Board. If any right granted under the Plan shall for any reason terminate without having been exercised, the Common Stock not purchased under such right shall again become available for issuance under the Plan.

(b) *Stock Distributed.* Any Common Stock distributed pursuant to the Plan may consist, in whole or in part, of authorized and unissued Common Stock, treasury stock or Common Stock purchased on the open market.

4. ***Offering Periods; Offering Documents.***

(a) *Offering Periods.* The Administrator may from time to time grant or provide for the grant of rights to purchase Common Stock under the Plan to Eligible Employees during one or more periods (each, an “***Offering Period***”) selected by the Administrator. The terms and conditions applicable to each Offering Period shall be set forth in an “***Offering Document***” adopted by the Administrator, which Offering Document shall be in such form and shall contain such terms and conditions as the Administrator shall deem appropriate and shall be incorporated by reference into and made part of the Plan and shall be attached hereto as part of the Plan. The provisions of separate Offering Periods under the Plan need not be identical.

(b) *Offering Documents.* Each Offering Document with respect to an Offering Period shall specify (through incorporation of the provisions of this Plan by reference or otherwise):

(i) the length of the Offering Period, which period shall not exceed twenty-seven months;

(ii) the maximum number of Shares that may be purchased by any Eligible Employee during such Offering Period, which, in the absence of a contrary designation by the Administrator, shall be [750] Shares;

(iii) such other provisions as the Administrator determines are appropriate, subject to the Plan.

5. ***Eligibility and Participation.***

(a) *Eligibility.* Any Eligible Employee who shall be employed by the Company or a Designated Subsidiary on a given Enrollment Date for an Offering Period shall be eligible to participate in the Plan during such Offering Period, subject to the requirements of this Section 5 and the limitations imposed by Section 423(b) of the Code.

(b) *Enrollment in Plan.*

(i) Except as otherwise set forth in an Offering Document or determined by the Administrator, an Eligible Employee may become a Participant in the Plan for an Offering Period by delivering a subscription agreement to the Company by such time prior to the Enrollment Date for such Offering Period (or such other date specified in the Offering Document) designated by the Administrator and in such form as the Company provides.

(ii) Each subscription agreement shall designate a whole percentage of such Eligible Employee’s Compensation to be withheld by the Company or the Designated Subsidiary employing such Eligible Employee on each payday during the Offering Period as payroll deductions under the Plan. An Eligible Employee may designate any whole percentage of Compensation that is not less than 1% and not more than the maximum percentage specified by the Administrator in the applicable Offering Document

(which percentage shall be [15]% in the absence of any such designation) as payroll deductions. The payroll deductions made for each Participant shall be credited to an account for such Participant under the Plan and shall be deposited with the general funds of the Company.

(iii) A Participant may increase or decrease the percentage of Compensation designated in his or her subscription agreement, subject to the limits of this Section 5(b), or may suspend his or her payroll deductions, at any time during an Offering Period; provided, however, that the Administrator may limit the number of changes a Participant may make to his or her payroll deduction elections during each Offering Period in the applicable Offering Document (and in the absence of any specific designation by the Administrator, a Participant shall be allowed one change to his or her payroll deduction elections during each Offering Period). Any such change or suspension of payroll deductions shall be effective with the first full payroll period following five business days after the Company's receipt of the new subscription agreement (or such shorter or longer period as may be specified by the Administrator in the applicable Offering Document). In the event a Participant suspends his or her payroll deductions, such Participant's cumulative payroll deductions prior to the suspension shall remain in his or her account and shall be applied to the purchase of Shares on the next occurring Purchase Date and shall not be paid to such Participant unless he or she withdraws from participation in the Plan pursuant to Section 7.

(iv) Except as otherwise set forth in an Offering Document or determined by the Administrator, a Participant may participate in the Plan only by means of payroll deduction and may not make contributions by lump sum payment for any Offering Period.

(c) *Payroll Deductions.* Except as otherwise provided in the applicable Offering Document, payroll deductions for a Participant shall commence on the first payroll following the Enrollment Date and shall end on the last payroll in the Offering Period to which the Participant's authorization is applicable, unless sooner terminated by the Participant as provided in Section 7 or suspended by the Participant or the Administrator as provided in Section 5(b) and Section 5(f), respectively.

(d) *Effect of Enrollment.* A Participant's completion of a subscription agreement will enroll such Participant in the Plan for each subsequent Offering Period on the terms contained therein until the Participant either submits a new subscription agreement, withdraws from participation under the Plan as provided in Section 7 (or ceases to be an Eligible Employee).

(e) *Limitation on Purchase of Common Stock.* An Eligible Employee may be granted rights under the Plan only if such rights, together with any other rights granted to such Eligible Employee under "employee stock purchase plans" of the Company, any Parent or any Subsidiary, as specified by Section 423(b)(8) of the Code, do not permit such employee's rights to purchase stock of the Company or any Parent or Subsidiary to accrue at a rate that exceeds \$25,000 of the fair market value of such stock (determined as of the first day of the Offering Period during which such rights are granted) for each calendar year in which such rights are outstanding at any time. This limitation shall be applied in accordance with Section 423(b)(8) of the Code.

(f) *Suspension of Payroll Deductions.* Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 5(e) or the other limitations set forth in this Plan, a Participant's payroll deductions may be suspended by the Administrator at any time during an Offering Period. The balance of the amount credited to the account of each Participant that has not been applied to the purchase of Shares by reason of Section 423(b)(8) of the Code, Section 5(e) or the other limitations set forth in this Plan shall be paid to such Participant in one lump sum in cash as soon as reasonably practicable after the Purchase Date.

(g) *Foreign Employees.* In order to facilitate participation in the Plan, the Administrator may provide for such special terms applicable to Participants who are citizens or residents of a foreign jurisdiction, or who are employed by a Designated Subsidiary outside of the United States, as the Administrator may consider necessary or appropriate to accommodate differences in local law, tax policy or custom. Such special terms may not be more favorable than the terms of rights granted under the Plan to Eligible Employees who are residents of the United States. Moreover, the Administrator may approve such supplements to, or amendments, restatements or alternative versions of, this Plan as it may consider necessary or appropriate for such purposes without thereby affecting the terms of this Plan as in effect for any other purpose. No such special terms, supplements, amendments or restatements shall include any provisions that are inconsistent with the terms of this Plan as then in effect unless this Plan could have been amended to eliminate such inconsistency without further approval by the stockholders of the Company.

(h) *Leave of Absence.* During leaves of absence approved by the Company meeting the requirements of Treasury Regulation Section 1.421-1(h)(2) under the Code, a Participant may continue participation in the Plan by making cash payments to the Company on his or her normal payday equal to his or her authorized payroll deduction.

6. ***Grant and Exercise of Rights.***

(a) *Grant of Rights.* On the Enrollment Date of each Offering Period, each Eligible Employee participating in such Offering Period shall be granted a right to purchase the maximum number of Shares specified under Section 4(b), subject to the limits in Section 5(e), and shall have the right to buy, on each Purchase Date during such Offering Period (at the applicable Purchase Price), such number of whole Shares as is determined by dividing (x) such Participant's payroll deductions accumulated prior to such Purchase Date and retained in the Participant's account as of the Purchase Date, by (y) the applicable Purchase Price (rounded down to the nearest Share). The right shall expire on the last day of the Offering Period.

(b) *Exercise of Rights.* On each Purchase Date, each Participant's accumulated payroll deductions and any other additional payments specifically provided for in the applicable Offering Document will be applied to the purchase of whole Shares, up to the maximum number of Shares permitted pursuant to the terms of the Plan and the applicable Offering Document, at the Purchase Price. No fractional Shares shall be issued upon the exercise of rights granted under the Plan, unless the Offering Document specifically provides otherwise. Any cash in lieu of fractional Shares remaining after the purchase of whole Shares upon exercise of a purchase right will be credited to a Participant's account and carried forward and applied toward the purchase of whole Shares for the next following Offering Period. Shares issued pursuant to the Plan may be evidenced in such manner as the Administrator may determine and may be issued in certificated form or issued pursuant to book-entry procedures.

(c) *Pro Rata Allocation of Shares.* If the Administrator determines that, on a given Purchase Date, the number of Shares with respect to which rights are to be exercised may exceed (i) the number of Shares that were available for issuance under the Plan on the Enrollment Date of the applicable Offering Period, or (ii) the number of Shares available for issuance under the Plan on such Purchase Date, the Administrator may in its sole discretion provide that the Company shall make a pro rata allocation of the Shares available for purchase on such Enrollment Date or Purchase Date, as applicable, in as uniform a manner as shall be practicable and as it shall determine in its sole discretion to be equitable among all Participants for whom rights to purchase Common Stock are to be exercised pursuant to this Section 6 on such Purchase Date, and shall either (x) continue all Offering Periods then in effect, or (y) terminate any or all Offering Periods then in effect pursuant to Section 9. The Company may make pro rata allocation of the Shares available on the Enrollment Date of any applicable Offering Period pursuant to the

preceding sentence, notwithstanding any authorization of additional Shares for issuance under the Plan by the Company's stockholders subsequent to such Enrollment Date. The balance of the amount credited to the account of each Participant that has not been applied to the purchase of Shares shall be paid to such Participant in one lump sum in cash as soon as reasonably practicable after the Purchase Date.

(d) *Withholding.* At the time a Participant's rights under the Plan are exercised, in whole or in part, or at the time some or all of the Common Stock issued under the Plan is disposed of, the Participant must make adequate provision for the Company's federal, state, or other tax withholding obligations, if any, that arise upon the exercise of the right or the disposition of the Common Stock. At any time, the Company may, but shall not be obligated to, withhold from the Participant's compensation the amount necessary for the Company to meet applicable withholding obligations.

(e) *Conditions to Issuance of Common Stock.* The Company shall not be required to issue or deliver any certificate or certificates for, or make any book entries evidencing, Shares purchased upon the exercise of rights under the Plan prior to fulfillment of all of the following conditions:

(i) The admission of such Shares to listing on all stock exchanges, if any, on which the Common Stock is then listed; and

(ii) The completion of any registration or other qualification of such Shares under any state or federal law or under the rulings or regulations of the Securities and Exchange Commission or any other governmental regulatory body, that the Administrator shall, in its absolute discretion, deem necessary or advisable; and

(iii) The obtaining of any approval or other clearance from any state or federal governmental agency that the Administrator shall, in its absolute discretion, determine to be necessary or advisable; and

(iv) The payment to the Company of all amounts that it is required to withhold under federal, state or local law upon exercise of the rights, if any; and

(v) The lapse of such reasonable period of time following the exercise of the rights as the Administrator may from time to time establish for reasons of administrative convenience.

7. *Withdrawal; Cessation of Eligibility.*

(a) *Withdrawal.* A Participant may withdraw all but not less than all of the payroll deductions credited to his or her account and not yet used to exercise his or her rights under the Plan at any time by giving written notice to the Company in a form acceptable to the Company no later than one week prior to the end of the Offering Period. All of the Participant's payroll deductions credited to his or her account during an Offering Period shall be paid to such Participant as soon as reasonably practicable after receipt of notice of withdrawal and such Participant's rights for the Offering Period shall be automatically terminated, and no further payroll deductions for the purchase of Shares shall be made for such Offering Period. If a Participant withdraws from an Offering Period, payroll deductions shall not resume at the beginning of the next Offering Period unless the Participant delivers to the Company a new subscription agreement.

(b) *Future Participation.* A Participant's withdrawal from an Offering Period shall not have any effect upon his or her eligibility to participate in any similar plan that may hereafter be adopted by the Company or a Designated Subsidiary or in subsequent Offering Periods that commence after the termination of the Offering Period from which the Participant withdraws.

(c) *Cessation of Eligibility.* Upon a Participant's ceasing to be an Eligible Employee for any reason, he or she shall be deemed to have elected to withdraw from the Plan pursuant to this Section 7 and the payroll deductions credited to such Participant's account during the Offering Period shall be paid to such Participant or, in the case of his or her death, to the person or persons entitled thereto under Section 12(d), as soon as reasonably practicable, and such Participant's rights for the Offering Period shall be automatically terminated.

8. **Adjustments Upon Changes in Stock.**

(a) *Changes in Capitalization.* Subject to Section 8(c), in the event that the Administrator determines that any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), Change in Control, reorganization, merger, amalgamation, consolidation, combination, repurchase, recapitalization, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or sale or exchange of Common Stock or other securities of the Company, issuance of warrants or other rights to purchase Common Stock or other securities of the Company, or other similar corporate transaction or event, as determined by the Administrator, affects the Common Stock such that an adjustment is determined by the Administrator to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended by the Company to be made available under the Plan or with respect to any outstanding purchase rights under the Plan, the Administrator shall make equitable adjustments, if any, to reflect such change with respect to (i) the aggregate number and type of Shares (or other securities or property) that may be issued under the Plan (including, but not limited to, adjustments of the limitations in Section 3(a) and the limitations established in each Offering Document pursuant to Section 4(b) on the maximum number of Shares that may be purchased); (ii) the class(es) and number of shares and price per Share subject to outstanding rights; and (iii) the Purchase Price with respect to any outstanding rights.

(b) *Other Adjustments.* Subject to Section 8(c), in the event of any transaction or event described in Section 8(a) or any unusual or nonrecurring transactions or events affecting the Company, any affiliate of the Company, or the financial statements of the Company or any affiliate (including without limitation any Change in Control), or of changes in Applicable Law or accounting principles, the Administrator, in its discretion, and on such terms and conditions as it deems appropriate, is hereby authorized to take any one or more of the following actions whenever the Administrator determines that such action is appropriate in order to prevent the dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan or with respect to any right under the Plan, to facilitate such transactions or events or to give effect to such changes in laws, regulations or principles:

(i) To provide for either (x) termination of any outstanding right in exchange for an amount of cash, if any, equal to the amount that would have been obtained upon the exercise of such right had such right been currently exercisable or (y) the replacement of such outstanding right with other rights or property selected by the Administrator in its sole discretion;

(ii) To provide that the outstanding rights under the Plan shall be assumed by the successor or survivor corporation, or a parent or subsidiary thereof, or shall be substituted for by similar rights covering the stock of the successor or survivor corporation, or a parent or subsidiary thereof, with appropriate adjustments as to the number and kind of shares and prices;

(iii) To make adjustments in the number and type of Shares (or other securities or property) subject to outstanding rights under the Plan and/or in the terms and conditions of outstanding rights and rights that may be granted in the future;

(iv) To provide that Participants' accumulated payroll deductions may be used to purchase Common Stock prior to the next occurring Purchase Date on such date as the Administrator determines in its sole discretion and the Participants' rights under the ongoing Offering Period(s) shall be terminated; and

(v) To provide that all outstanding rights shall terminate without being exercised.

(c) *No Adjustment Under Certain Circumstances.* No adjustment or action described in this Section 8 or in any other provision of the Plan shall be authorized to the extent that such adjustment or action would cause the Plan to fail to satisfy the requirements of Section 423 of the Code.

(d) *No Other Rights.* Except as expressly provided in the Plan, no Participant shall have any rights by reason of any subdivision or consolidation of shares of stock of any class, the payment of any dividend, any increase or decrease in the number of shares of stock of any class or any dissolution, liquidation, merger, or consolidation of the Company or any other corporation. Except as expressly provided in the Plan or pursuant to action of the Administrator under the Plan, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number of Shares subject to outstanding rights under the Plan or the Purchase Price with respect to any outstanding rights.

9. ***Amendment, Modification and Termination.***

(a) *Amendment, Modification and Termination.* The Administrator may amend, suspend or terminate the Plan at any time and from time to time; provided, however, that approval of the Company's stockholders shall be required to amend the Plan to: (i) increase the aggregate number, or change the type, of shares that may be sold pursuant to rights under the Plan under Section 3(a) (other than an adjustment as provided by Section 8); (ii) change the corporations or classes of corporations whose employees may be granted rights under the Plan; or (iii) change the Plan in any manner that would cause the Plan to no longer be an "employee stock purchase plan" within the meaning of Section 423(b) of the Code.

(b) *Certain Changes to Plan.* Without stockholder consent and without regard to whether any Participant rights may be considered to have been adversely affected, to the extent permitted by Section 423 of the Code, the Administrator shall be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld from the Participant's Compensation during an Offering Period, establish the exchange ratio applicable to amounts withheld from the Participant's Compensation in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a Participant in a properly completed subscription agreement in order to adjust for delays or mistakes in the Company's processing of payroll withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with amounts withheld from the Participant's Compensation, and establish such other limitations or procedures as the Administrator determines in its sole discretion to be advisable that are consistent with the Plan.

(c) *Actions In the Event of Unfavorable Financial Accounting Consequences.* In the event the Administrator determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Administrator may, in its discretion and, to the extent necessary or desirable, modify or amend the Plan to reduce or eliminate such accounting consequence including, but not limited to:

(i) altering the Purchase Price for any Offering Period including an Offering Period underway at the time of the change in Purchase Price;

(ii) shortening any Offering Period so that the Offering Period ends on a new Purchase Date, including an Offering Period underway at the time of the Administrator action; and

(iii) allocating Shares.

Such modifications or amendments shall not require stockholder approval or the consent of any Participant.

(d) *Payments Upon Termination of Plan.* Upon termination of the Plan, the balance in each Participant's Plan account shall be refunded as soon as practicable after such termination, without any interest thereon.

10. **Term of Plan.**

The Plan shall be effective on the Effective Date. The effectiveness of the Plan shall be subject to approval of the Plan by the stockholders of the Company within twelve months following the date the Plan is first approved by the Board. No right may be granted under the Plan prior to such stockholder approval. No rights may be granted under the Plan during any period of suspension of the Plan or after termination of the Plan.

11. **Administration.**

(a) *Administrator.* Unless otherwise determined by the Board, the Administrator of the Plan shall be the Compensation Committee of the Board (or another committee or a subcommittee of the Board to which the Board delegates administration of the Plan) (such committee, the "**Committee**"). The Board may at any time vest in the Board any authority or duties for administration of the Plan.

(b) *Action by the Administrator.* Unless otherwise established by the Board or in any charter of the Administrator, a majority of the Administrator shall constitute a quorum. The acts of a majority of the members present at any meeting at which a quorum is present and, subject to Applicable Law and the Bylaws of the Company, acts approved in writing by a majority of the Administrator in lieu of a meeting, shall be deemed the acts of the Administrator. Each member of the Administrator is entitled to, in good faith, rely or act upon any report or other information furnished to that member by any officer or other Employee, the Company's independent certified public accountants, or any executive compensation consultant or other professional retained by the Company to assist in the administration of the Plan.

(c) *Authority of Administrator.* The Administrator shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine when and how rights to purchase Common Stock shall be granted and the provisions of each offering of such rights (which need not be identical).

(ii) To designate from time to time which Subsidiaries of the Company shall be Designated Subsidiaries, which designation may be made without the approval of the stockholders of the Company.

(iii) To construe and interpret the Plan and rights granted under it, and to establish, amend and revoke rules and regulations for its administration. The Administrator, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iv) To amend the Plan as provided in Section 9.

(v) Generally, to exercise such powers and to perform such acts as the Administrator deems necessary or expedient to promote the best interests of the Company and its Subsidiaries and to carry out the intent that the Plan be treated as an “employee stock purchase plan” within the meaning of Section 423 of the Code.

(d) *Decisions Binding.* The Administrator’s interpretation of the Plan, any rights granted pursuant to the Plan, any subscription agreement and all decisions and determinations by the Administrator with respect to the Plan are final, binding, and conclusive on all parties.

12. *Miscellaneous.*

(a) *Restriction upon Assignment.* A right granted under the Plan shall not be transferable other than by will or the applicable laws of descent and distribution, and is exercisable during the Participant’s lifetime only by the Participant. Except as provided in Section 12(d) hereof, a right under the Plan may not be exercised to any extent except by the Participant. The Company shall not recognize and shall be under no duty to recognize any assignment or alienation of the Participant’s interest in the Plan, the Participant’s rights under the Plan or any rights thereunder.

(b) *Rights as a Stockholder.* With respect to Shares subject to a right granted under the Plan, a Participant shall not be deemed to be a stockholder of the Company, and the Participant shall not have any of the rights or privileges of a stockholder, until such Shares have been issued to the Participant or his or her nominee following exercise of the Participant’s rights under the Plan. No adjustments shall be made for dividends (ordinary or extraordinary, whether in cash securities, or other property) or distribution or other rights for which the record date occurs prior to the date of such issuance, except as otherwise expressly provided herein or as determined by the Administrator.

(c) *Interest.* No interest shall accrue on the payroll deductions or contributions of a Participant under the Plan.

(d) *Designation of Beneficiary.*

(i) A Participant may, in the manner determined by the Administrator, file a written designation of a beneficiary who is to receive any Shares and cash, if any, from the Participant’s account under the Plan in the event of such Participant’s death subsequent to a Purchase Date on which the Participant’s rights are exercised but prior to delivery to such Participant of such Shares and cash. In addition, a Participant may file a written designation of a beneficiary who is to receive any cash from the Participant’s account under the Plan in the event of such Participant’s death prior to exercise of the Participant’s rights under the Plan. If the Participant is married and resides in a community property state, a designation of a person other than the Participant’s spouse as his or her beneficiary shall not be effective without the prior written consent of the Participant’s spouse.

(ii) Such designation of beneficiary may be changed by the Participant at any time by written notice to the Company. In the event of the death of a Participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such Participant’s death, the Company shall deliver such Shares and/or cash to the executor or administrator of the estate of the Participant, or if no such executor or administrator has been appointed (to the knowledge of the

Company), the Company, in its discretion, may deliver such Shares and/or cash to the spouse or to any one or more dependents or relatives of the Participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

(e) *Notices.* All notices or other communications by a Participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

(f) *Equal Rights and Privileges.* Subject to Section 5(g), all Eligible Employees will have equal rights and privileges under this Plan so that this Plan qualifies as an “employee stock purchase plan” within the meaning of Section 423 of the Code. Subject to Section 5(g), any provision of this Plan that is inconsistent with Section 423 of the Code will, without further act or amendment by the Company, the Board or the Administrator, be reformed to comply with the equal rights and privileges requirement of Section 423 of the Code.

(g) *Use of Funds.* All payroll deductions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such payroll deductions.

(h) *Reports.* Statements of account shall be given to participating Eligible Employees at least annually, which statements shall set forth the amounts of payroll deductions, the Purchase Price, the number of Shares purchased and the remaining cash balance, if any.

(i) *No Employment Rights.* Nothing in the Plan shall be construed to give any person (including any Eligible Employee or Participant) the right to remain in the employ of the Company or any Parent or Subsidiary or affect the right of the Company or any Parent or Subsidiary to terminate the employment of any person (including any Eligible Employee or Participant) at any time, with or without cause.

(j) *Notice of Disposition of Shares.* Each Participant shall give prompt notice to the Company of any disposition or other transfer of any Shares purchased upon exercise of a right under the Plan if such disposition or transfer is made: (i) within two years from the Enrollment Date of the Offering Period in which the Shares were purchased or (ii) within one year after the Purchase Date on which such Shares were purchased. Such notice shall specify the date of such disposition or other transfer and the amount realized, in cash, other property, assumption of indebtedness or other consideration, by the Participant in such disposition or other transfer.

(k) *Governing Law.* The Plan and any agreements hereunder shall be administered, interpreted and enforced under the internal laws of the State of Delaware without regard to conflicts of laws thereof or of any other jurisdiction.

(l) *Electronic Forms.* To the extent permitted by Applicable Law and in the discretion of the Administrator, an Eligible Employee may submit any form or notice as set forth herein by means of an electronic form approved by the Administrator. Before the commencement of an Offering Period, the Administrator shall prescribe the time limits within which any such electronic form shall be submitted to the Administrator with respect to such Offering Period in order to be a valid election.

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SERES THERAPEUTICS, INC.

NON-EMPLOYEE DIRECTOR COMPENSATION PROGRAM

Non-employee members of the board of directors (the “**Board**”) of Seres Therapeutics, Inc. (the “**Company**”) shall receive cash and equity compensation as set forth in this Non-Employee Director Compensation Program (this “**Program**”). The cash and equity compensation described in this Program shall be paid or be made, as applicable, automatically and without further action of the Board, to each member of the Board who is not an employee of the Company or any parent or subsidiary of the Company (each, a “**Non-Employee Director**”) who is entitled to receive such cash or equity compensation, unless such Non-Employee Director declines the receipt of such cash or equity compensation by written notice to the Company. This Program shall remain in effect until it is revised or rescinded by further action of the Board. This Program may be amended, modified or terminated by the Board at any time in its sole discretion. The terms and conditions of this Program shall supersede any prior cash and/or equity compensation arrangements for service as a member of the Board between the Company and any of its Non-Employee Directors. No Non-Employee Director shall have any rights hereunder, except with respect to stock options granted pursuant to the Program. This Program shall become effective on the date of the effectiveness of the Company’s Registration Statement on Form S-1 relating to the initial public offering of common stock (the “**Effective Date**”).

I. CASH COMPENSATION

A. Annual Retainers. Each Non-Employee Director shall receive an annual retainer of \$35,000 for service on the Board.

B. Additional Annual Retainers. In addition, each Non-Employee Director shall receive the following annual retainers:

1. *Chairman of the Board or Lead Independent Director*. A Non-Employee Director serving as Chairman of the Board or Lead Independent Director shall receive an additional annual retainer of \$20,000 for such service.

2. *Audit Committee*. A Non-Employee Director serving as Chairperson of the Audit Committee shall receive an additional annual retainer of \$15,000 for such service. A Non-Employee Director serving as a member other than the Chairperson of the Audit Committee shall receive an additional annual retainer of \$7,500 for such service.

3. *Compensation Committee*. A Non-Employee Director serving as Chairperson of the Compensation Committee shall receive an additional annual retainer of \$10,000 for such service. A Non-Employee Director serving as a member other than the Chairperson of the Compensation Committee shall receive an additional annual retainer of \$5,000 for such service.

4. *Nominating and Corporate Governance Committee*. A Non-Employee Director serving as Chairperson of the Nominating and Corporate Governance Committee shall receive an additional annual retainer of \$7,000 for such service. A Non-Employee Director serving as a member other than the Chairperson of the Nominating and Corporate Governance Committee shall receive an additional annual retainer of \$3,500 for such service.

C. Payment of Retainers. The annual retainers described in Sections I(A) and I(B) shall be earned on a quarterly basis based on a calendar quarter and shall be paid in cash by the Company in arrears not later than the fifteenth day following the end of each calendar quarter. In the event a Non-Employee Director does not serve as a Non-Employee Director, or in the applicable positions described in Section I(B), for an entire calendar quarter, the retainer paid to such Non-Employee Director shall be prorated for the portion of such calendar quarter actually served as a Non-Employee Director, or in such position, as applicable.

II. EQUITY COMPENSATION

Non-Employee Directors shall be granted the equity awards described below. The awards described below shall be granted under and shall be subject to the terms and provisions of the Company's 2015 Incentive Award Plan or any other applicable Company equity incentive plan then-maintained by the Company (the "**Equity Plan**") and shall be granted subject to award agreements, including attached exhibits, in substantially the form previously approved by the Board. All applicable terms of the Equity Plan apply to this Program as if fully set forth herein, and all grants of stock options hereby are subject in all respects to the terms of the Equity Plan and the applicable award agreement. For the avoidance of doubt, the share numbers in Sections II(A) and II(B) shall be subject to adjustment as provided in the Equity Plan, including without limitation with respect to any stock dividend, stock split, reverse stock split or other similar event affecting the Company's common stock that is effected prior to the Effective Date.

A. Initial Awards. Each Non-Employee Director who is initially elected or appointed to the Board after the Effective Date shall receive an option to purchase 30,000 shares of the Company's common stock on the date of such initial election or appointment. The awards described in this Section II(A) shall be referred to as "**Initial Awards.**" No Non-Employee Director shall be granted more than one Initial Award.

B. Subsequent Awards. A Non-Employee Director who (i) has been serving as a Non-Employee Director on the Board for at least six months as of the date of any annual meeting of the Company's stockholders after the Effective Date and (ii) will continue to serve as a Non-Employee Director immediately following such meeting, shall be automatically granted an option to purchase 15,000 shares of the Company's common stock on the date of such annual meeting. The awards described in this Section II(B) shall be referred to as "**Subsequent Awards.**" For the avoidance of doubt, a Non-Employee Director elected for the first time to the Board at an annual meeting of the Company's stockholders shall only receive an Initial Award in connection with such election, and shall not receive any Subsequent Award on the date of such meeting as well.

C. Termination of Service of Employee Directors. Members of the Board who are employees of the Company or any parent or subsidiary of the Company who subsequently terminate their service with the Company and any parent or subsidiary of the Company and remain on the Board will not receive an Initial Award pursuant to Section II(A)

above, but to the extent that they are otherwise entitled, will receive, after termination from service with the Company and any parent or subsidiary of the Company, Subsequent Awards as described in Section II(B) above.

D. Terms of Awards Granted to Non-Employee Directors

1. *Exercise Price.* The per share exercise price of each option granted to a Non-Employee Director shall equal the Fair Market Value (as defined in the Equity Plan) of a share of common stock on the date the option is granted.

2. *Vesting.* Each Initial Award shall vest and become exercisable in four substantially equal annual installments following the date of grant, such that the Initial Award shall be fully vested on the fourth anniversary of the date of grant, subject to the Non-Employee Director continuing in service as a Non-Employee Director through each such vesting date. Each Subsequent Award shall vest and become exercisable on the earlier of the first anniversary of the date of grant or the day immediately prior to the date of the next annual meeting of the Company's stockholders occurring after the date of grant, in either case subject to the Non-Employee Director continuing in service on the Board as a Non-Employee Director through each such vesting date. Unless the Board otherwise determines, any portion of an Initial Award or Subsequent Award which is unvested or unexercisable at the time of a Non-Employee Director's termination of service on the Board as a Non-Employee Director shall be immediately forfeited upon such termination of service and shall not thereafter become vested and exercisable. All of a Non-Employee Director's Initial Awards and Subsequent Awards shall vest in full immediately prior to the occurrence of a Change in Control (as defined in the Equity Plan), to the extent outstanding at such time.

3. *Term.* The maximum term of each stock option granted to a Non-Employee Director hereunder shall be ten (10) years from the date the option is granted.

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**FORM OF
INDEMNIFICATION AGREEMENT**

THIS INDEMNIFICATION AGREEMENT (this “*Agreement*”) is made and entered into as of [] [], 20[], by and between Seres Therapeutics, Inc. (the “*Company*”) and [] (“*Indemnitee*”).

RECITALS

WHEREAS, the Company values Indemnitee’s service to the Company as a director or officer and desires that Indemnitee continue to serve the Company in such capacity;

WHEREAS, Indemnitee does not regard the protection available under the organizational documents of the Company and any insurance policies maintained by the Company as adequate in the present circumstances, and Indemnitee may not be willing to continue to serve in his or her capacity as a director or officer of the Company without the additional protections set forth in this Agreement;

WHEREAS, the Board of Directors of the Company (the “*Board*”) has determined that, on the basis of the foregoing, it is reasonable, prudent and necessary for the Company to obligate itself contractually to indemnify, and to advance expenses on behalf of, Indemnitee to the fullest extent permitted by applicable law so that Indemnitee will serve or continue to serve the Company free from undue concern that he or she will not be so indemnified;

WHEREAS, this Agreement is a supplement to and in furtherance of the organizational documents of the Company and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and

WHEREAS, Indemnitee may have certain rights to indemnification and/or insurance provided by an investment or venture capital fund with which Indemnitee is or may become affiliated (the “*Associated Fund*”) which Indemnitee and the Associated Fund intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company’s acknowledgement and agreement to the foregoing being a material condition to Indemnitee’s willingness to serve on the Board.

NOW, THEREFORE, in consideration of the mutual promises and agreements herein contained, and intending to be legally bound, the parties hereto agree as follows:

AGREEMENT

1. INDEMNIFICATION OF INDEMNITEE AND ASSOCIATED FUND. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent permitted by applicable law, as such may be amended from time to time. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

(a) Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(a) if, by reason of his or her Corporate Status (as defined in Section 13(c)), the

Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as defined in Section 13(j)) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as defined in Section 13(g)), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or her, or on his or her behalf, in connection with such Proceeding or any claim, issue or matter therein, if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful.

(b) Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of his or her Corporate Status, the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by the Indemnitee, or on the Indemnitee's behalf, in connection with such Proceeding if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, that if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that a court of competent jurisdiction shall determine that such indemnification may be made.

(c) Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his or her Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he or she shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by him or her, or on his or her behalf, in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or her, or on his or her behalf, in connection with each successfully resolved claim, issue or matter. For purposes of this Section 1(c) and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

(d) If the Associated Fund is, or is threatened to be made, a party to or a participant in any Proceeding relating to or arising by reason of the Associated Fund's position as a stockholder of, or lender to, the Company, or the Associated Fund's appointment of or affiliation with Indemnitee or any other director, including without limitation any alleged misappropriation of a Company asset or corporate opportunity, any claim of misappropriation or infringement of intellectual property relating to the Company, any alleged false or misleading statement or omission made by the Company (or on its behalf) or its employees or agents, or any allegation of inappropriate control or influence over the Company or its Board members, officers, equity holders or debt holders, then the Associated Fund will be entitled to indemnification hereunder for Expenses to the same extent as Indemnitee, and the terms of this Agreement as they relate to procedures for indemnification of Indemnitee and advancement of Expenses shall apply to any such indemnification of the Associated Fund. The rights provided to the Associated Fund under this Section 1(d) shall: (i) be suspended during any period during which the Associated Fund

does not have a representative on the Board; and (ii) terminate on an initial public offering of the Company's Common Stock under the Securities Act of 1933, as amended (an "*IPO*"); provided, however, that in the event of any such suspension or termination, the Associated Fund's rights to indemnification will not be suspended or terminated with respect to any Proceeding based in whole or in part on facts and circumstances occurring at any time prior to such suspension or termination regardless of whether the Proceeding arises before or after such suspension or termination. The Company and Indemnitee agree that the Associated Fund is an express third party beneficiary of the terms of this Section 1(d).

2. ADDITIONAL INDEMNITY. In addition to, and without regard to any limitations on, the indemnification provided for in Section 1 of this Agreement, the Company shall and hereby does indemnify and hold harmless Indemnitee against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or her, or on his or her behalf if, by reason of his or her Corporate Status, he or she is, or is threatened to be made, a party to or participant in any Proceeding (including a Proceeding by or in the right of the Company), including, without limitation, all liability arising out of the negligence or active or passive wrongdoing of Indemnitee. The only limitation that shall exist upon the Company's obligations pursuant to this Agreement shall be that the Company shall not be obligated to make any payment to Indemnitee that is finally determined (under the procedures, and subject to the presumptions, set forth in Sections 6 and 7 hereof) to be unlawful.

3. CONTRIBUTION.

(a) Whether or not the indemnification provided in Sections 1 and 2 hereof is available, in respect of any Proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such Proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such Proceeding without requiring Indemnitee to contribute to such payment and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not enter into any settlement of any Proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such Proceeding) unless such settlement provides for a full and final release of all claims asserted against Indemnitee.

(b) Without diminishing or impairing the obligations of the Company set forth in Section 3(a), if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any Proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such Proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such Proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction from which such Proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such Proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the events that resulted in such expenses,

judgments, fines or settlement amounts, as well as any other equitable considerations which the Law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such Proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

(c) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution which may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

(d) To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect: (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

4. INDEMNIFICATION FOR EXPENSES OF A WITNESS. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his or her Corporate Status, a witness, or is made (or asked to) respond to discovery requests, in any Proceeding to which Indemnitee is not a party, he or she shall be indemnified against all Expenses actually and reasonably incurred by him or her, or on his or her behalf, in connection therewith.

5. ADVANCEMENT OF EXPENSES. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within thirty (30) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 5 shall be unsecured and interest free.

6. PROCEDURES AND PRESUMPTIONS FOR DETERMINING ENTITLEMENT TO INDEMNIFICATION. It is the intent of this Agreement to secure for Indemnitee rights of indemnification that are as favorable as may be permitted under applicable law. Accordingly,

the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. Notwithstanding the foregoing, any failure of Indemnitee to provide such a request to the Company, or to provide such a request in a timely fashion, shall not relieve the Company of any liability that it may have to Indemnitee unless, and to the extent that, such failure actually and materially prejudices the interests of the Company.

(b) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 6(a) hereof, a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following four methods, which shall be at the election of the Board: (i) by a majority vote of the Disinterested Directors (as defined in Section 13(d)), even though less than a quorum; (ii) by a committee of those Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum; (iii) if there are no Disinterested Directors or if the Disinterested Directors so direct, by Independent Counsel (as defined in Section 13(h)) in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee, or (iv) if so directed by the Board, by the stockholders of the Company; provided, however, that, notwithstanding the foregoing, any determination with respect to Indemnitee's entitlement to indemnification hereunder that is made at any time following the consummation of a Change in Control (as defined in Section 13(b)) that occurs at any time when the Company has a class of securities registered under the Exchange Act (as defined in Section 13(f)) or following the consummation of an IPO shall be made solely by Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee.

(c) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 6(b) hereof, the Independent Counsel shall be selected as provided in this Section 6(c). The Independent Counsel shall be selected by the Board. Indemnitee may, within 10 days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 13(h) of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after submission by Indemnitee of a written request for indemnification pursuant to Section 6(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition a court of competent jurisdiction for resolution of any objection which shall have been made by the Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 6(b) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent

Counsel in connection with acting pursuant to Section 6(b) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 6(c), regardless of the manner in which such Independent Counsel was selected or appointed.

(d) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence. Neither the failure of the Company (including by its directors or independent legal counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its directors or independent legal counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(e) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise (as defined in Section 13(e)), including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 6(e) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(f) If the person, persons or entity empowered or selected under this Section 6 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within sixty (60) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent: (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification; or (ii) a prohibition of such indemnification under applicable law; provided, however, that such 60-day period may be extended for a reasonable time, not to exceed an additional thirty (30) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided, further, that the foregoing provisions of this Section 6(f) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 6(b) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five (75) days after such receipt and such

determination is made thereat or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(g) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board or stockholder of the Company shall act reasonably and in good faith in making a determination regarding the Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(h) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any Proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such Proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such Proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(i) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

7. REMEDIES OF INDEMNITEE.

(a) In the event that: (i) a determination is made pursuant to Section 6 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement; (ii) advancement of Expenses is not timely made pursuant to Section 5 of this Agreement; (iii) no determination of entitlement to indemnification is made pursuant to Section 6(b) of this Agreement within ninety (90) days after receipt by the Company of the request for indemnification; (iv) payment of indemnification is not made pursuant to this Agreement within ten (10) days after receipt by the Company of a written request therefor; or (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 6 of this Agreement, Indemnitee shall be entitled to an adjudication in any

court of competent jurisdiction of Indemnitee's entitlement to such indemnification. Indemnitee shall commence such proceeding seeking an adjudication within one hundred eighty (180) days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 7(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.

(b) In the event that a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 7 shall be conducted in all respects as a de novo trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 6(b).

(c) If a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 7, absent: (i) a misstatement by Indemnitee of a material fact or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification; or (ii) a prohibition of such indemnification under applicable law.

(d) In the event that Indemnitee, pursuant to this Section 7, seeks a judicial adjudication of his or her rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on his or her behalf, in advance, any and all expenses (of the types described in the definition of "Expenses" in Section 13(g) of this Agreement) actually and reasonably incurred by him or her in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 7 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. The Company shall indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within ten (10) days after receipt by the Company of a written request therefor) advance, to the extent not prohibited by law, such expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advance of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

8. NON-EXCLUSIVITY, SURVIVAL OF RIGHTS, ETC.

(a) The rights of indemnification as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the organizational documents of the Company, any other agreement with the Company, a vote of the Company's stockholders, a resolution of the Board or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in any applicable law, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Company's organizational documents and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents or fiduciaries of the Company or of any other Enterprise, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any director, officer, employee, agent or fiduciary under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(c) The Company hereby acknowledges that Indemnitee may have certain rights to indemnification, advancement of expenses and/or insurance provided by the Associated Fund and/or certain of its affiliates (collectively, the "**Additional Indemnitors**"). The Company hereby agrees that: (i) it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Additional Indemnitors (or any insurance carrier providing insurance coverage purchased by any Additional Indemnitor) to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary); (ii) it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the organizational documents of the Company, without regard to any rights Indemnitee may have against the Additional Indemnitors (or any insurance carrier providing insurance coverage purchased by any Additional Indemnitor); and (iii) it irrevocably waives, relinquishes and releases the Additional Indemnitors from any and all claims against the Additional Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Additional Indemnitors on behalf of

Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Additional Indemnitors shall have a right of indemnification and/or be subrogated to the full extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Additional Indemnitors are express third party beneficiaries of the terms of this Section 8(c).

(d) Except as provided in Section 8(c) above, in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee (other than against the Additional Indemnitors), who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e) Except as provided in Section 8(c) above, the Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received payment of such amounts under any insurance policy, contract, other agreement or otherwise.

(f) Except as provided in Section 8(c) above, the Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, employee or agent of any Enterprise other than the Company shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of expenses from such other Enterprise.

9. EXCEPTION TO RIGHT OF INDEMNIFICATION. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to provide any indemnification in connection with any claim made against Indemnitee: (i) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision, provided that the foregoing shall not affect the rights of Indemnitee or the Additional Indemnitors set forth in Section 8(c); (ii) for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Exchange Act or similar provisions of state statutory law or common law; or (iii) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (A) the Board authorized the Proceeding (or any part of any Proceeding) prior to its initiation or (B) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law.

10. DURATION OF AGREEMENT. All agreements and obligations of the Company contained herein shall continue until the date that is six (6) years after the date upon which Indemnitee's Corporate Status terminates and shall continue thereafter so long as Indemnitee shall be subject to any Proceeding (or any proceeding commenced under Section 7 hereof) by reason of his or her Corporate Status, whether or not he or she is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement. This Agreement shall be binding upon and inure to the benefit

of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), assigns, spouses, heirs, executors and personal and legal representatives.

11. SECURITY. To the extent requested by Indemnitee and approved by the Board, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of the Indemnitee.

12. ENFORCEMENT. The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as an officer or director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as an officer or director of the Company. The Company shall not seek from a court, or agree to, a "bar order" that would have the effect of prohibiting or limiting Indemnitee's rights to receive advancement of Expenses under this Agreement.

13. DEFINITIONS. For purposes of this Agreement:

(a) "**Beneficial Owner**" shall have the meaning given to such term in Rule 13d-3 under the Exchange Act; provided, however, that Beneficial Owner shall exclude any Person otherwise becoming a Beneficial Owner by reason of the stockholders of the Company approving a merger of the Company with another entity.

(b) A "**Change in Control**" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) any Person is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing fifteen percent (15%) or more of the combined voting power of the Company's then outstanding securities;

(ii) during any period of two (2) consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 13(b)(i), (b)(iii) or (b)(iv)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a least a majority of the members of the Board;

(iii) the effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than fifty-one percent (51%) of the combined voting

power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the Board or other governing body of such surviving entity;

(iv) the approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; or

(v) there occurs any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or a response to any similar item on any similar schedule or form) promulgated under the Exchange Act, whether or not the Company is then subject to such reporting requirement.

(c) "**Corporate Status**" describes the status of a person who is or was at any time (including, without limitation, any time prior to the date of this Agreement) a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.

(d) "**Disinterested Director**" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(e) "**Enterprise**" shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.

(f) "**Exchange Act**" shall mean the Securities Exchange Act of 1934, as amended.

(g) "**Expenses**" shall include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding, or responding to, or objecting to, a request to provide discovery in any Proceeding. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding and any federal, state, local or foreign taxes imposed on the Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement, including without limitation the premium, security for, and other costs relating to any cost bond, supersede as bond, or other appeal bond or its equivalent. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(h) "**Independent Counsel**" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards

of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(i) "**Person**" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Exchange Act; provided, however, that Person shall exclude: (i) the Company; (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company; and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(j) "**Proceeding**" includes any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding (including one pending on or before the date of this Agreement but excluding one initiated by an Indemnitee pursuant to Section 7 of this Agreement to enforce his or her rights under this Agreement), whether brought by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of the fact that Indemnitee is or was an officer or director of the Company, by reason of any action taken by him or her or of any inaction on his or her part while acting as an officer or director of the Company, or by reason of the fact that he or she is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other Enterprise, in each case whether or not he or she is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement.

14. SEVERABILITY. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.

15. MODIFICATION AND WAIVER. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

16. NOTICE BY INDEMNITEE. Indemnitee agrees to promptly notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.

17. NOTICES. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified; (ii) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day; (iii) five (5) business days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one business (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All notices and other communications shall be sent:

(a) To Indemnitee at the address set forth below Indemnitee's signature hereto.

(b) To the Company at:

Seres Therapeutics, Inc.
215 First St. Ste 440
Cambridge, MA 02142
Attention: Board of Directors

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

18. HEADINGS. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

19. GOVERNING LAW. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules that would require application of the laws of any other jurisdiction.

20. ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

21. COUNTERPARTS. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature (or other similar electronic means) and in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the day and year first above written.

SERES THERAPEUTICS, INC.

By: _____
Name:
Title:

INDEMNITEE

Name:
Address:

[Signature Page to Indemnification Agreement]

This LOAN AND SECURITY AGREEMENT (this "Agreement") is entered into as of September 9, 2013, by and between COMERICA BANK ("Bank") and SERES HEALTH, INC., a Delaware corporation ("Borrower").

RECITALS

Borrower wishes to obtain credit from time to time from Bank, and Bank desires to extend credit to Borrower. This Agreement sets forth the terms on which Bank will advance credit to Borrower, and Borrower will repay the amounts owing to Bank.

AGREEMENT

The parties agree as follows:

1. DEFINITIONS AND CONSTRUCTION.

1.1 Definitions. As used in this Agreement, all capitalized terms shall have the definitions set forth on Exhibit A. Any term used in the Code and not defined herein shall have the meaning given to the term in the Code.

1.2 Accounting Terms. Any accounting term not specifically defined on Exhibit A shall be construed in accordance with GAAP and all calculations shall be made in accordance with GAAP. The term "financial statements" shall include the accompanying notes and schedules.

2. LOAN AND TERMS OF PAYMENT.

2.1 Credit Extensions.

(a) Promise to Pay; Use of Proceeds. Borrower promises to pay to Bank, in lawful money of the United States of America, the aggregate unpaid principal amount of all Credit Extensions made by Bank to Borrower, together with interest on the unpaid principal amount of such Credit Extensions at rates in accordance with the terms hereof. Borrower shall use the proceeds of the Credit Extensions solely as working capital, and to fund its general business requirements, including capital expenditures, and not for personal, family, household or agricultural purposes.

(b) [Reserved].

(c) Growth Capital Advances.

(i) Availability. Subject to and upon the terms and conditions of this Agreement, Borrower may request, and Bank agrees to make Growth Capital Advances to Borrower. On the Closing Date, or as soon thereafter as may be practical, the initial Growth Capital Advance shall be made in an aggregate principal amount equal to One Million Dollars (\$1,000,000). Thereafter, Borrower may request Growth Capital Advances through Growth Capital Availability End Date. The aggregate principal amount of all Growth Capital Advances shall not, in any event, exceed the Growth Capital Line. Each Growth Capital Advance shall be in a minimum amount of \$500,000.

(ii) Repayment. Interest shall accrue from the date of each Growth Capital Advance at the rate specified in the Pricing Addendum, and shall be payable in accordance with Section 2.3(b) and on the terms set forth in the Pricing Addendum. Borrower shall make monthly payments of interest-only, commencing on the first day of the month following the funding of such Growth Capital Advance, and continuing on the first day of each successive month thereafter through the Growth Capital Availability End Date. Any Growth Capital Advances that are outstanding on the Growth Capital Availability End Date shall be payable in thirty (30) consecutive equal monthly installments of principal, plus all accrued and unpaid interest, beginning on September 1, 2014, and continuing on the same day of each month thereafter, unless such day is not a Business Day and then on the next Business Day thereafter, until paid in full. Notwithstanding (but without duplication with) the foregoing, on

the Growth Capital Maturity Date, if the Final Payment has not previously been paid in full in connection with the prepayment of the Growth Capital Advances, Borrower shall pay to Bank the Final Payment in respect of each Growth Capital Advance. Growth Capital Advances, once repaid, may not be reborrowed. Borrower may only voluntarily prepay the Growth Capital Advances in accordance with Section 2.1(c)(iv) below.

(iii) Procedures for Borrowing. Other than on the Closing Date, when Borrower desires to obtain a Growth Capital Advance, Borrower shall notify Bank (which notice shall be irrevocable) by facsimile transmission to be received no later than 3:00 p.m. Eastern Time three (3) Business Days before the day on which the Growth Capital Advance is to be made. Such notice shall be substantially in the form of Exhibit C. The notice shall be signed by a Responsible Officer or its designee. Bank shall be entitled to rely on any facsimile given by a person who Bank reasonably believes to be a Responsible Officer or a designee thereof, and Borrower shall indemnify and hold Bank harmless for any damages or loss suffered by Bank as a result of such reliance.

(iv) Voluntary Prepayments. Except as set forth in the Pricing Addendum, Borrower shall have the option to prepay all, but not less than all, of the Growth Capital Advances in full, provided Borrower (a) provides written notice to Bank of its election to prepay the Growth Capital Advances at least three (3) days prior to such prepayment, and (b) pays to Bank, on the date of such prepayment, an amount equal to the sum of (1) all outstanding principal of the Growth Capital Advances, plus (2) all accrued and unpaid interest in respect of the Growth Capital Advances and all other unpaid fees and expenses, including Bank Expenses, owing hereunder, plus (3) the Final Payment, plus (4) all other sums, if any, that shall have become due and payable under the Loan Documents, including interest at the Default Rate with respect to any past due amounts.

(v) Mandatory Prepayment on Acceleration. If the Growth Capital Advances are accelerated following the occurrence of an Event of Default, Borrower shall immediately pay to Bank an amount equal to the sum of: (a) all outstanding principal of the Growth Capital Advances, plus (b) all accrued and unpaid interest thereon through the prepayment date and all other unpaid fees and expenses, including Bank Expenses, owing hereunder, plus (c) the Final Payment, plus (d) all other Obligations that are due and payable under the Loan Documents, including interest at the Default Rate with respect to any past due amounts.

2.2 [Reserved].

2.3 Interest Rates, Payments, and Calculations.

(a) Interest Rate. The Growth Capital Advances shall bear interest, on the outstanding daily balance thereof, on the terms set forth in the Pricing Addendum.

(b) Payments. Bank shall, at its option, charge such interest, all Bank Expenses, and all Periodic Payments against any of Borrower's deposit accounts. Any interest not paid when due shall be compounded by becoming a part of the Obligations, and such interest shall thereafter accrue interest at the rate then applicable hereunder. All payments shall be free and clear of any taxes, withholdings, duties, impositions or other charges, to the end that Bank will receive the entire amount of any Obligations payable hereunder, regardless of source of payment.

2.4 Crediting Payments. Prior to the occurrence and continuance of an Event of Default, Bank shall credit a wire transfer of funds, check or other item of payment to such deposit account or Obligation as Borrower specifies. After the occurrence and during the continuance of an Event of Default, Bank shall have the right, in its sole discretion, to immediately apply any wire transfer of funds, check, or other item of payment Bank may receive to conditionally reduce Obligations, but such applications of funds shall not be considered a payment on account unless such payment is of immediately available federal funds or unless and until such check or other item of payment is honored when presented for payment. Notwithstanding anything to the contrary contained herein, any wire transfer or payment received by Bank after 12:00 noon Eastern Time shall be deemed to have been received by Bank as of the opening of business on the immediately following Business Day. Whenever any payment to Bank under the Loan Documents would otherwise be due (except by reason of acceleration) on a date that is not a Business Day, such payment shall instead be due on the next Business Day, and additional fees or interest, as the case may be, shall accrue and be payable for the period of such extension.

2.5 Fees. Borrower shall pay to Bank the following:

(a) Facility Fee. On the Closing Date, a facility fee equal to Five Thousand Dollars (\$5,000), which shall be fully-earned and nonrefundable;

(b) Final Payment Fee. The Final Payment on the earliest to occur of (i) the Growth Capital Maturity Date, (ii) the acceleration of any Growth Capital Advances, or (iii) the prepayment of a Growth Capital Advance pursuant to Section 2.1(c)(iv) or (v); and

(c) Bank Expenses. On the Closing Date, all Bank Expenses incurred through the Closing Date, and, after the Closing Date, all Bank Expenses, as and when they become due; provided, that Borrower's liability for Bank Expenses incurred prior to and as of the Closing Date in connection with the negotiation and documentation of the Loan Documents shall be limited to Twenty Five Thousand Dollars (\$25,000) provided there is a customary level of negotiation of the Loan Documents.

2.6 Term. This Agreement shall become effective on the Closing Date and, subject to Section 13.8, shall continue in full force and effect for so long as any Obligations (other than inchoate indemnity obligations as to which no claim has been asserted or is known to exist) remain outstanding or Bank has any obligation to make Credit Extensions under this Agreement or any other Loan Document (excluding the Warrant). Notwithstanding the foregoing, Bank shall have the right to terminate its obligation to make Credit Extensions under this Agreement immediately and without notice upon the occurrence and during the continuance of an Event of Default.

3. CONDITIONS OF LOANS.

3.1 Conditions Precedent to Initial Credit Extension. The obligation of Bank to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, the following:

(a) this Agreement, duly executed by Borrower;

(b) an officer's certificate of Borrower with respect to incumbency and resolutions authorizing the execution and delivery of this Agreement and the other Loan Documents;

(c) the Pricing Addendum, duly executed by Borrower;

(d) a financing statement (Form UCC-1);

(e) agreement to furnish insurance, duly executed by Borrower;

(f) payment of the fees and Bank Expenses then due specified in Section 2.5;

(g) current SOS Reports indicating that except for Permitted Liens, there are no other security interests or Liens of record in the Collateral;

(h) current financial statements, including company prepared financial statements for Borrower's most recently ended fiscal year, company prepared consolidated balance sheets and income statements for the most recently ended month in accordance with Section 6.2, and such other updated financial information as Bank may reasonably request;

(i) current Compliance Certificate in accordance with Section 6.2;

(j) a Warrant in form and substance satisfactory to Bank, duly executed by Borrower;

(k) a Collateral Information Certificate, duly executed by Borrower;

(l) an Automatic Loan Payment Authorization, duly executed by Borrower; and

(m) such other documents, instruments and certificates, and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

3.2 Conditions Precedent to all Credit Extensions. The obligation of Bank to make each Credit Extension, including the initial Credit Extension, is further subject to the following conditions:

(a) timely receipt by Bank of the Payment/Advance Form as provided in Section 2.1;

(b) the representations and warranties contained in the Loan Documents shall be true and correct in all material respects on and as of the date of such Payment/Advance Form and on the effective date of each Credit Extension as though made at and as of each such date, and no Event of Default shall have occurred and be continuing, or would exist after giving effect to such Credit Extension (provided, however, that those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date, and provided further, that that such materiality qualifiers shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof). The making of each Credit Extension shall be deemed to be a representation and warranty by Borrower on the date of such Credit Extension as to the accuracy of the facts referred to in this Section 3.2; and

(c) no event or circumstance shall exist or have occurred that has had or could reasonably be expected to have a Material Adverse Effect.

4. CREATION OF SECURITY INTEREST.

4.1 Grant of Security Interest. Borrower grants and pledges to Bank a continuing security interest in the Collateral to secure prompt repayment of any and all Obligations and to secure prompt performance by Borrower of each of its covenants and duties under the Loan Documents (other than the Warrant). Except as set forth in the Schedule, subject to Permitted Liens of the type described in clauses (c), (f) and (j) of the definition of Permitted Liens that may have superior priority to Bank's Lien under this Agreement, such security interest constitutes a valid, first priority security interest in the presently existing Collateral, and will constitute a valid, first priority security interest in later-acquired Collateral. Borrower also hereby agrees not to sell, transfer, assign, mortgage, pledge, lease, grant a security interest in, or encumber, or allow a Lien on, any of its Intellectual Property, except in connection with Liens of the type described in clauses (b) and (e) of the definition of Permitted Liens and Permitted Transfers. Notwithstanding any termination of this Agreement, Bank's Lien on the Collateral shall remain in effect for so long as any Obligations (other than inchoate indemnity obligations as to which no claim has been asserted or is known to exist) are outstanding or Bank has any obligation to make Credit Extensions under this Agreement or any other Loan Document.

4.2 Perfection of Security Interest. Borrower authorizes Bank to file at any time financing statements, continuation statements, and amendments thereto that (i) either specifically describe the Collateral or describe the Collateral as all assets of Borrower of the kind pledged hereunder, and (ii) contain any other information required by the Code for the sufficiency of filing office acceptance of any financing statement, continuation statement, or amendment, including whether Borrower is an organization, the type of organization and any organizational identification number issued to Borrower, if applicable. Any such financing statements may be filed by Bank at any time in any jurisdiction whether or not Division 9 of the Code is then in effect in that jurisdiction. Borrower shall from time to time endorse and deliver to Bank, at the request of Bank, all Negotiable Collateral and other documents that Bank may reasonably request, in form satisfactory to Bank, to perfect and continue perfection of Bank's security interests in the Collateral and in order to fully consummate all of the transactions contemplated under the Loan Documents. Borrower shall have possession of the Collateral, except where expressly otherwise provided in this Agreement or where Bank chooses to perfect its security interest by possession in addition to the filing of a financing statement. Where Collateral with an aggregate book value not to

exceed \$150,000 is in possession of a third party bailee, Borrower shall take such steps as Bank reasonably requests for Bank to (i) obtain an acknowledgment, in form and substance satisfactory to Bank, of the bailee that the bailee holds such Collateral for the benefit of Bank, and (ii) obtain “control” of any Collateral consisting of investment property, deposit accounts, securities accounts, letter-of-credit rights or electronic chattel paper (as such items and the term “control” are defined in Division 9 of the Code) by causing the securities intermediary or depository institution or issuing bank to execute a control agreement in form and substance satisfactory to Bank subject to the terms therein; provided that control agreements shall not be required during the transition period provided under Section 6.6 so long as Borrower is in compliance with the terms thereof. Borrower will not create any chattel paper without placing a legend on the chattel paper acceptable to Bank indicating that Bank has a security interest in the chattel paper. Borrower from time to time may deposit with Bank specific cash collateral to secure specific Obligations; Borrower authorizes Bank to hold such specific balances in pledge and to decline to honor any drafts thereon or any request by Borrower or any other Person to pay or otherwise transfer any part of such balances for so long as the specific Obligations are outstanding.

4.3 Right to Inspect. Bank (through any of its officers, employees, or agents) shall have the right, upon reasonable prior notice, from time to time during Borrower’s usual business hours but no more than once each year (unless an Event of Default has occurred and is continuing), to inspect Borrower’s Books and to make copies thereof and to check, test, and appraise the Collateral in order to verify Borrower’s financial condition or the amount, condition of, or any other matter relating to, the Collateral.

4.4 Pledge of Collateral. Borrower hereby pledges, assigns and grants to Bank a security interest in all the Shares, together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations; provided that Bank shall not have a security interest in more than sixty-five percent (65%) of the voting Equity Interests in any Excluded Foreign Subsidiary. On the Closing Date, the certificate or certificates for the pledged Shares, if any, will be delivered to Bank, accompanied by an instrument of assignment duly executed in blank by Borrower. To the extent required by the terms and conditions governing the Shares, Borrower shall cause the books of each entity whose Shares are part of the Collateral and any transfer agent to reflect the pledge of the Shares. Upon the occurrence and during the continuance of an Event of Default hereunder, Bank may effect the transfer of any securities included in the Collateral (including but not limited to the Shares) into the name of Bank and cause new certificates representing such securities to be issued in the name of Bank or its transferee. Borrower will execute and deliver such documents, and take or cause to be taken such actions, as Bank may reasonably request to perfect or continue the perfection of Bank’s security interest in the pledged Shares. Unless an Event of Default shall have occurred and be continuing, Borrower shall be entitled to exercise any voting rights with respect to the pledged Shares and to give consents, waivers and ratifications in respect thereof, provided that no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms and Borrower shall be permitted to receive any cash dividend or other distribution with respect to the Shares. All such rights to vote and give consents, waivers and ratifications and to receive cash dividends and other distributions, shall terminate upon the occurrence and continuance of an Event of Default.

5. REPRESENTATIONS AND WARRANTIES.

Borrower represents and warrants as follows:

5.1 Due Organization and Qualification. Borrower and each Subsidiary is an entity duly existing under the laws of the jurisdiction in which it is incorporated or organized, as applicable, and qualified and licensed to do business in any state in which the conduct of its business or its ownership of property requires that it be so qualified, except where the failure to do so could not reasonably be expected to cause a Material Adverse Effect.

5.2 Due Authorization; No Conflict. The execution, delivery, and performance of the Loan Documents are within Borrower’s powers, have been duly authorized, and are not in conflict with nor constitute a breach of any provision contained in Borrower’s organizational documents, nor will they constitute an event of default under any material agreement by which Borrower is bound. Borrower is not in default under any agreement by which it is bound, except to the extent such default would not reasonably be expected to cause a Material Adverse Effect.

5.3 Collateral. Borrower has rights in or the power to transfer the Collateral, and its title to the Collateral is free and clear of Liens, adverse claims, and restrictions on transfer or pledge except for Permitted Liens. Other than Inventory that is in transit, movable Equipment (such as mobile phones, laptops and the like) with employees and consultants, and Inventory and Equipment at cleaning or repair locations in each case in the ordinary course of business or as permitted pursuant to the terms of this Agreement, all Collateral is located solely in the Collateral States at the locations specified in the Collateral Information Certificate, and at such other locations as may be timely disclosed in writing to Bank pursuant to Section 7.2. The Accounts are bona fide existing obligations of the account debtors. No licenses or agreements giving rise to any Accounts is with any Prohibited Territory or with any Person organized under or doing business in a Prohibited Territory. All Inventory is in all material respects of good and merchantable quality, free from all material defects, except for Inventory for which adequate reserves have been made. Except as set forth in the Schedule or as disclosed in writing from time to time with respect to accounts maintained outside of Bank to the extent expressly permitted under Section 6.6, none of the Collateral consisting of deposit, investment or securities accounts is maintained or invested with a Person other than Bank or Bank's Affiliates.

5.4 Intellectual Property. Borrower is the sole owner of the Intellectual Property, except for (i) licenses of the type identified in clause (b) of the definition of Permitted Transfer, and (ii) over the counter software that is commercially available to the public. To the best of Borrower's knowledge, each of the Copyrights, Trademarks and Patents is valid and enforceable, and no part of the Intellectual Property has been judged invalid or unenforceable, in whole or in part, and no claim has been made to Borrower that any part of the Intellectual Property violates the rights of any third party except to the extent such invalidity, unenforceability or claim could not reasonably be expected to cause a Material Adverse Effect. Borrower's rights as a licensee of intellectual property (including trademarks), other than off-the-shelf or shrink-wrap licenses, do not give rise to more than five percent (5%) of its gross revenue in any given month, including without limitation revenue derived from the sale, licensing, rendering or disposition of any product or service.

5.5 Name; Location of Chief Executive Office; Location of Inventory and Equipment. Except as disclosed in the Schedule, Borrower has not done business during the five (5) years prior to the Closing Date, under any name other than that specified on the signature page hereof, and its exact legal name is as set forth in the first paragraph of this Agreement. The chief executive office of Borrower is located in the Chief Executive Office State at the address indicated in Section 10 hereof or at such other location as to which Borrower has provided timely written notice in accordance with Section 7.2 hereof. Except as disclosed in the Schedule, all Inventory and Equipment of Borrower in an aggregate book value over \$150,000 is located at the address indicated in Section 10 hereof, or at such other location as to which Borrower has provided timely written notice in accordance with Section 7.10 hereof.

5.6 Actions, Suits, Litigation, or Proceedings. Except as set forth in the Schedule, there are no actions, suits, litigation or proceedings, at law or in equity, pending by or against Borrower or any Subsidiary before any court, administrative agency, or arbitrator which could reasonably be expected to have a Material Adverse Effect.

5.7 No Material Adverse Change in Financial Statements. All consolidated financial statements related to Borrower and any Subsidiary that are delivered by Borrower to Bank fairly present in all material respects Borrower's consolidated financial condition as of the date thereof and Borrower's consolidated results of operations for the period then ended. As of the Closing Date, the date of delivery of each borrowing request and the date of funding of each Credit Extension, there has not been a material adverse change in the consolidated financial condition of Borrower since the date of the most recent of such financial statements submitted to Bank. As of the date referenced in each Compliance Certificate delivered to Bank, except as set forth in such Compliance certificate, there has not been a material adverse change in the consolidated financial condition of Borrower since the date of the most recent of such financial statements submitted to Bank.

5.8 Solvency, Payment of Debts. Borrower is able to pay its debts (including trade debts) as they mature; the fair saleable value of Borrower's assets (including goodwill minus disposition costs) exceeds the fair value of its liabilities; and Borrower is not left with unreasonably small capital after the transactions contemplated by this Agreement.

5.9 Compliance with Laws and Regulations. Borrower and each Subsidiary have met the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. No event has occurred resulting from Borrower's failure to comply with ERISA that is reasonably likely to result in Borrower's incurring any liability that could reasonably be expected to have a Material Adverse Effect. Borrower is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. Borrower is not engaged principally, or as one of the important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations T, U, and X of the Board of Governors of the Federal Reserve System). Borrower has complied in all material respects with all the provisions of the Federal Fair Labor Standards Act. Borrower is in compliance with all environmental laws, regulations and ordinances except where the failure to comply is not reasonably likely to have a Material Adverse Effect. Borrower has not violated any statutes, laws, ordinances or rules applicable to it, the violation of which could reasonably be expected to have a Material Adverse Effect. Borrower and each Subsidiary have filed or caused to be filed all tax returns required to be filed, and have paid, or have made adequate provision for the payment of, all taxes reflected therein except those being contested in good faith with adequate reserves under GAAP or where the failure to file such returns or pay such taxes could not reasonably be expected to have a Material Adverse Effect.

5.10 Subsidiaries. Borrower does not own any stock, partnership interest or other equity securities of any Person, except for Permitted Investments. As of the Closing Date, Borrower has no Subsidiaries.

5.11 Government Consents. Borrower and each Subsidiary have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary for the continued operation of Borrower's business as currently conducted, except where the failure to do so would not reasonably be expected to cause a Material Adverse Effect.

5.12 Restricted Agreements. Except as disclosed on the Schedule or as timely disclosed in writing to Bank pursuant to Section 6.9, Borrower is not a party to, nor is bound by, any Restricted Agreement.

5.13 Shares. Borrower has full power and authority to create a first lien on the pledged Shares and no disability or contractual obligation exists that would prohibit Borrower from pledging such Shares pursuant to this Agreement. To Borrower's knowledge, there are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the pledged Shares. The pledged Shares have been and will be duly authorized and validly issued, and are fully paid and non-assessable. To Borrower's knowledge, the Shares are not the subject of any present or threatened suit, action, arbitration, administrative or other proceeding, and Borrower knows of no reasonable grounds for the institution of any such proceedings.

5.14 Full Disclosure. No representation, warranty or other statement made by Borrower in any certificate or written statement furnished to Bank taken together with all such certificates and written statements furnished to Bank contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading, it being recognized by Bank that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not to be viewed as facts and that actual results during the period or periods covered by any such projections and forecasts may differ from the projected or forecasted results.

6. AFFIRMATIVE COVENANTS.

Borrower covenants that, until payment and satisfaction in full of all outstanding Obligations (other than inchoate indemnity obligations as to which no claim has been asserted or is known to exist), and for so long as Bank may have any commitment to make a Credit Extension hereunder, Borrower shall, and shall cause each Subsidiary to, do all of the following:

6.1 Good Standing and Government Compliance.

(a) Borrower shall maintain its corporate existence in the Borrower State. Notwithstanding the foregoing, it shall not be deemed a violation of this Section 6.1(a) if Borrower effects a statutory conversion, under and in compliance with Section 214 of the Delaware Limited Liability Company Act, as in effect on the Closing Date, from a Delaware corporation to a Delaware limited liability company, so long as each of the following have occurred or have been satisfied to the satisfaction of Bank: (i) Borrower is the continuing and surviving entity in such conversion, such conversion does not result in a change in Borrower's taxpayer identification number, and such conversion does not result in the creation of a "new debtor" (as such term is defined in the Code); (ii) such conversion has no adverse effect on the validity, enforceability, attachment, perfection or priority of Bank's security interests in the Collateral; (iii) such conversion does not involve a Transfer by Borrower or merger or consolidation involving Borrower; (iv) such conversion is otherwise permitted under this Agreement and the other Loan Documents and would not result in a violation of any covenant or agreement contained herein or therein; (v) no Event of Default, or any event or circumstance that with the giving of notice or the passage of time (or both) could result in an Event of Default, exists at the time of such conversion, or could reasonably be expected to occur immediately following such conversion; (vi) such conversion is permitted under and is effected in compliance with all applicable law, including the Delaware General Corporation Law and the Delaware Limited Liability Company Act; (vii) Borrower shall have delivered to Bank, not less than thirty (30) days' prior to the effective date of such conversion, a certificate of a Responsible Officer of Borrower in form and substance satisfactory to Bank, which shall include but not be limited to: (A) the proposed effective date of such conversion, (B) the exact legal name of Borrower following such conversion, (C) true, correct and complete copies of the certificate of conversion and certificate of formation to be filed with the Delaware Secretary of State, and (D) a true, correct and complete copy of the limited liability company agreement for Borrower to be effective following such conversion; (viii) Borrower shall have delivered to Bank a certificate of a Responsible Officer of Borrower, as of the effective date of such conversion, in form and substance satisfactory to Bank, which shall include but not be limited to certification: (A) certification as to the matters in clauses (i) through (vi) above, and (B) that Borrower has delivered to Bank, true, correct and complete copies of all stockholder and board approvals obtained or required in connection with such conversion and the duly executed limited liability company agreement becoming effective upon such conversion; (ix) Borrower shall have executed and delivered to Bank an amendment to this Agreement (including an assumption and reaffirmation of the Obligations and Bank's Liens and authorizations to file such financing statement amendments or additional financing statements as Bank may require) and an officer's certificate of Borrower with respect to incumbency and resolutions authorizing the execution, delivery and performance of this Agreement and the other Loan Documents with respect to the new name and organizational structure resulting from such conversion, in each case in form and substance satisfactory to Bank; (x) Bank has determined that such conversion does not create any regulatory or legal issues or issues with respect to Bank's customer identification program; (xi) Parent Holding Company shall have assumed the Warrant on terms satisfactory to Bank, and shall have issued to Bank a new warrant agreement on terms reasonably satisfactory to Bank; and (xii) Borrower and Parent Holding Company shall have delivered to Bank such other documents, instruments, agreements, waivers, consents, resolutions, reaffirmations, authorizations, opinions and certificates as Bank may request in connection with such conversion. At all times following the effective date of such conversion, Borrower shall maintain its limited liability company existence in the Borrower State.

(b) Borrower shall maintain its good standing in the Borrower State and shall cause each of its Subsidiaries' to maintain their respective organizational existence and good standing in their respective jurisdictions of organization, shall maintain qualification and good standing in each other jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Effect, and shall furnish to Bank the organizational identification number issued to Borrower or any Subsidiary by the authorities of the jurisdiction in which Borrower or any Subsidiary is organized, if applicable. Borrower shall meet, and shall cause each Subsidiary to meet, the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. Borrower shall comply in all material respects with all applicable Environmental Laws, and maintain all material permits, licenses and approvals required thereunder where the failure to do so could reasonably be expected to have a Material Adverse Effect. Borrower shall comply, and shall cause each Subsidiary to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, and shall maintain, and shall cause each of its Subsidiaries to maintain, in force all licenses, approvals and agreements, the loss of which or failure to comply with which could reasonably be expected to have a Material Adverse Effect.

6.2 Financial Statements, Reports, Certificates. Borrower shall deliver the following to Bank:

(a) (i) as soon as available, but in any event within thirty (30) days after the end of each calendar month, a company prepared consolidated balance sheet and income statement covering Borrower's operations during such period prepared in accordance with GAAP (subject to normal year-end adjustments and without all required footnotes), in a form reasonably acceptable to Bank and certified by a Responsible Officer; (ii) as soon as available, but in any event within one hundred eighty (180) days after the end of Borrower's fiscal year (commencing with the fiscal year ending December 31, 2013), audited consolidated financial statements of Borrower prepared in accordance with GAAP, consistently applied, together with an opinion which is unqualified (except for a going concern comment or qualification related solely the need to raise additional equity capital due to Borrower not having sufficient cash to support 12 months of operations) or otherwise consented to in writing by Bank on such financial statements of an independent certified public accounting firm reasonably acceptable to Bank; (iii) if applicable, copies of all statements, reports and notices sent or made available generally by Borrower to its security holders or to any holders of Subordinated Debt and all reports on Forms 10-K and 10-Q filed with the Securities and Exchange Commission; (iv) promptly upon receipt of notice thereof, a report of any legal actions pending or threatened against Borrower or any Subsidiary that could reasonably be expected to result in damages or costs to Borrower or any Subsidiary of Two Hundred Fifty Thousand Dollars (\$250,000) or more; (v) promptly upon receipt, each management letter prepared by Borrower's independent certified public accounting firm regarding Borrower's management control systems; (vi) as soon as available, but in any event not later than forty-five (45) days after the last day of each fiscal year, Borrower's financial and business projections and budget for the immediately following fiscal year (with quarterly detail), with evidence of approval thereof by Borrower's board of directors; and (vii) such budgets, sales projections, operating plans or other financial information generally prepared by Borrower in the ordinary course of business as Bank may reasonably request from time to time.

(b) [Reserved].

(c) Within thirty (30) days after the last day of each month, Borrower shall deliver to Bank with the monthly financial statements a Compliance Certificate certified as of the last day of the applicable month and signed by a Responsible Officer in substantially the form of Exhibit D hereto.

(d) Immediately upon becoming aware of the occurrence or existence of an Event of Default hereunder, a written statement of a Responsible Officer setting forth details of the Event of Default, and the action which Borrower has taken or proposes to take with respect thereto.

(e) Bank shall have a right from time to time hereafter to audit Borrower's Accounts and appraise Collateral at Borrower's expense, provided that such audits will be conducted no more often than every twelve (12) months unless an Event of Default has occurred and is continuing.

Borrower may deliver to Bank on an electronic basis any certificates, reports or information required pursuant to this Section 6.2, and Bank shall be entitled to rely on the information contained in the electronic files, provided that Bank in good faith believes that the files were delivered by a Responsible Officer. If Borrower delivers this information electronically, it shall also deliver to Bank by U.S. Mail, reputable overnight courier service, hand delivery, facsimile or .pdf file within five (5) Business Days of submission of the unsigned electronic copy the certification of monthly financial statements, and the Compliance Certificate, each bearing the physical signature of the Responsible Officer.

6.3 Inventory; Returns. Borrower shall keep all Inventory in good and merchantable condition, free from all material defects except for Inventory for which adequate reserves have been made. Returns and allowances, if any, as between Borrower and its account debtors shall be on the same basis and in accordance with the usual customary practices of Borrower, as they exist on the Closing Date. Borrower shall promptly notify Bank of all returns and recoveries and of all disputes and claims with respect to Borrower involving more than Two Hundred Fifty Thousand Dollars (\$250,000).

6.4 Taxes. Borrower shall make, and cause each Subsidiary to make, due and timely payment or deposit of all material federal, state, and local taxes, assessments, or contributions required of it by law, including, but not limited to, those laws concerning income taxes, F.I.C.A., F.U.T.A. and state disability, and will execute and deliver to Bank, on demand, proof satisfactory to Bank indicating that Borrower or a Subsidiary has made such payments or deposits and any appropriate certificates attesting to the payment or deposit thereof; provided that Borrower or a Subsidiary need not make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings and is reserved against (to the extent required by GAAP) by Borrower.

6.5 Insurance.

(a) Borrower, at its expense, shall keep the Collateral insured against loss or damage by fire, theft, explosion, sprinklers, and all other hazards and risks, and in such amounts, as ordinarily insured against by other owners in similar businesses conducted in the locations where Borrower's business is conducted on the date hereof. Borrower shall also maintain liability and other insurance in amounts and of a type that are customary to businesses similar to Borrower's.

(b) All such policies of insurance shall be in such form, with such companies, and in such amounts as are reasonably satisfactory to Bank. All policies of property insurance shall contain a lender's loss payable endorsement, in a form satisfactory to Bank, showing Bank as an additional loss payee, and all liability insurance policies shall show Bank as an additional insured and specify that the insurer must give at least thirty (30) days' notice to Bank before canceling or not renewing its policy for any reason. Upon Bank's request, Borrower shall deliver to Bank certified copies of the policies of insurance and evidence of all premium payments. If no Event of Default has occurred and is continuing, proceeds payable under any casualty policy will, at Borrower's option, be payable to Borrower to replace the property subject to the claim, provided that any such replacement property shall be deemed Collateral in which Bank has been granted a first priority security interest. If an Event of Default has occurred and is continuing, all proceeds payable under any such policy shall, at Bank's option, be payable to Bank to be applied on account of the Obligations.

6.6 Accounts. Borrower shall maintain all its, and shall cause all of its Subsidiaries to maintain their, depository, operating, cash management accounts with Bank and all of its and their primary investment and securities accounts with Bank; provided, however, that Borrower shall have until sixty (60) days after the Closing Date to complete the transfer to Bank of its account balances maintained at the other banks and financial institutions in the accounts identified on the Schedule and to close all such accounts, so long as the aggregate amount on deposit in such accounts at no time exceeds One Million Five Hundred Thousand Dollars (\$1,500,000).

6.7 [Reserved].

6.8 Intellectual Property Rights.

(a) Borrower shall register or cause to be registered (to the extent not already registered) with the United States Patent and Trademark Office or the United States Copyright Office, as the case may be, those registrable intellectual property rights now owned or hereafter developed or acquired by Borrower, to the extent that Borrower, in its reasonable business judgment, deems it appropriate to so protect such intellectual property rights.

(b) Borrower shall give Bank prompt written notice of any applications or registrations of intellectual property rights filed with the United States Patent and Trademark Office, including the date of such filing and the registration or application numbers, if any.

(c) Borrower shall give Bank prompt written notice of the filing of any applications or registrations with the United States Copyright Office, including the title of such intellectual property rights to be registered, as such title will appear on such applications or registrations, and the date such applications or registrations will be filed.

(d) Borrower shall to (i) protect, defend and maintain the validity and enforceability of the Intellectual Property material to Borrower's business, (ii) use commercially reasonable efforts to detect infringements of the Intellectual Property and promptly advise Bank in writing of material infringements detected and (iii) not allow any material Intellectual Property to be abandoned, forfeited or dedicated to the public without the written consent of Bank, which shall not be unreasonably withheld.

6.9 Restricted Agreement Consents. Promptly after entering into or becoming bound by any Restricted Agreement, Borrower shall: (i) provide written notice to Bank of the material terms of such license or agreement with a description of its likely impact on Borrower's business or financial condition; and (ii) use commercially reasonable efforts to take such actions as Bank may reasonably request to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (A) Borrower's interest in such licenses or contract rights to be deemed Collateral and for Bank to have a security interest in such license or contract right, and to have the power to assign such license or contract rights in connection with an enforcement of remedies, that might otherwise be restricted by the terms of the applicable license or agreement, whether now existing or entered into in the future, and (B) Bank to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Bank's rights and remedies under this Agreement and the other Loan Documents.

6.10 Creation/Acquisition of Subsidiaries. Without limiting the generality of any other provision hereof, in the event Borrower or any Subsidiary creates or acquires any Subsidiary, Borrower and such Subsidiary shall promptly notify Bank of the creation or acquisition of such new Subsidiary and take all such action as may be reasonably required by Bank to cause each such Subsidiary (other than an Excluded Foreign Subsidiary) to guarantee the Obligations of Borrower under the Loan Documents and, in each case, grant a continuing pledge and security interest in and to the property and assets of such Subsidiary (substantially as described on Exhibit B hereto), and Borrower (or any intermediate Subsidiary holding the Equity Interests in such Subsidiary) shall grant and pledge to Bank a perfected security interest in the Equity Interests of such Subsidiary (regardless of whether or not it is an Excluded Foreign Subsidiary); provided that Bank shall not have a security interest in more than sixty-five percent (65%) of the voting Equity Interests of any Excluded Foreign Subsidiary.

6.11 Parent Holding Company. Without limiting the generality of any other provision hereof, not less than thirty (30) days prior to the acquisition by, or transfer to, a Parent Holding Company of Borrower's Equity Interests, Borrower shall provide written notice to Bank of such acquisition or transfer, which notice shall include, but not be limited to, the proposed date for the transaction, a description of the transaction in reasonable detail, certified copies of Parent Holding Company's organizational documents (including its operating agreement if a limited liability company), a pro forma capitalization table for Borrower and such Parent Holding Company as of the date immediately following such transaction, and such other documents, instruments and agreements relating thereto as Bank may require. Prior to or concurrent with such acquisition or transfer, Borrower and Parent Holding Company shall and take all such action as may be required by Bank, including the execution and delivery of such documents, instruments, agreements and certificates as Bank may require, to cause each Parent Holding Company to become a co-borrower hereunder or, at Bank's sole discretion, to unconditionally guarantee the Obligations of Borrower under the Loan Documents, and, in each case, grant a continuing pledge and security interest in and to the property and assets of Parent Holding Company (substantially as described on Exhibit B hereto), including without limitation a pledge of all of the Equity Interests of Borrower and delivery to Bank of original share certificates accompanied by assignments separate from certificate (or other appropriate instruments of transfer) duly executed in blank.

6.12 Further Assurances. At any time and from time to time Borrower shall execute and deliver such further instruments and take such further action as may reasonably be requested by Bank to effect the purposes of this Agreement.

7. NEGATIVE COVENANTS.

Borrower covenants and agrees that, so long as any credit hereunder shall be available and until the outstanding Obligations (other than inchoate indemnity obligations as to which no claim has been asserted or is known to exist) are paid and satisfied in full or for so long as Bank may have any commitment to make any Credit Extension, Borrower will not, and will not permit any Subsidiary to, do any of the following without Bank's prior written consent:

7.1 Dispositions. Convey, sell, lease, license, transfer or otherwise dispose of (collectively, to “Transfer”), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, or subject to Section 6.6 of this Agreement, move cash balances on deposit with Bank to accounts opened at another financial institution, other than Permitted Transfers.

7.2 Change in Name, Location, Executive Office, or Executive Management; Change in Business; Change in Fiscal Year; Change in Control. Change its name or the Borrower State without thirty (30) days’ prior written notification to Bank; relocate its chief executive office without twenty (20) days’ prior written notification to Bank; without at least fifteen (15) days’ prior written notice to Bank, add any new offices or business or Collateral locations unless such new offices or locations contain, in the aggregate, less than \$150,000 in Borrower’s or such Subsidiaries’ assets or property; replace its chief executive officer or chief financial officer, if one exists, without written notification to Bank promptly thereafter; engage in any business, or permit any of its Subsidiaries to engage in any business, other than or reasonably related or incidental to the businesses currently engaged in by Borrower; change its fiscal year end; have a Change in Control.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization (other than mergers or consolidations of a Subsidiary into another Subsidiary or into Borrower), or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person, or enter into any agreement to do any of the same.

7.4 Indebtedness. Create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on Borrower an obligation to prepay any Indebtedness, except Indebtedness to Bank or as expressly agreed to by, in writing, Bank under the relevant subordination agreement.

7.5 Encumbrances. Create, incur, assume or allow any Lien with respect to any of its property, or assign or otherwise convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for (a) with respect to Intellectual Property, Permitted Liens of the type described in clauses (b), (e) and (i) of the definition of Permitted Liens, and (b) with respect to other property, Permitted Liens, or covenant to any other Person that Borrower in the future will refrain from creating, incurring, assuming or allowing any Lien with respect to any of Borrower’s property, or permit any Subsidiary to do so.

7.6 Distributions. Pay any dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any Equity Interests, except that, subject to the last sentence of this Section 7.6, Borrower may (a) pay up to One Hundred Thousand Dollars (\$100,000) in the aggregate in any fiscal year to repurchase outstanding capital stock issued by Borrower as required pursuant to customary stock repurchase agreements approved by Borrower’s Board of Directors, from former officers, directors or employees upon the death, disability or termination or cessation of employment or service of such officers, directors or employees, (b) pay any dividends or make any distribution solely in common stock of Borrower, provided that such dividends or distributions of such stock or equity do not otherwise violate the terms of this Agreement and no Event of Default has occurred and is continuing at the time of making such dividend or distribution or would result from the making of such dividend or distribution, (c) purchase, redeem, or otherwise acquire shares of its equity interests or warrant or options to acquire any such equity interests from its stockholders consistent with the requirement of existing equity agreements of Borrower to the extent the consideration paid in respect thereof is paid solely in equity interests of Borrower, and (d) make distributions in cash in the aggregate amount not to exceed One Hundred Fifty Thousand Dollars (\$150,000) during the term of this Agreement. Notwithstanding the foregoing, Borrower shall be permitted to make such repurchases only if, at the time of such repurchase, and immediately after giving effect thereto: (i) no Event of Default, or any event or circumstance that with the giving of notice or the passage of time (or both) could result in an Event of Default, exists or could reasonably be expected to occur, (ii) Borrower is solvent, and (iii) such distribution is permitted under and is made in compliance with applicable law, including Sections 170 and 173 of the Delaware General Corporation Law.

7.7 Investments. Directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries to do so, other than Permitted Investments, or maintain or invest any of its property with a Person other than Bank or Bank’s Affiliates or permit any Subsidiary to do so except as expressly permitted under Section 6.6, or suffer or permit any Subsidiary to be a party to, or be bound by, an agreement that

restricts such Subsidiary from paying dividends or otherwise distributing property to Borrower. Further, Borrower shall not enter into, or permit any Subsidiary or Affiliate to enter into, any license or agreement with any Prohibited Territory or with any Person organized under or doing business in a Prohibited Territory.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower except for: (a) transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, and (b) transactions constituting bona fide rounds of preferred stock financing (or "bridge" convertible Subordinated Debt financing primarily with venture capital or private equity investors) for capital raising purposes, provided that such transactions are approved by Borrower's Board of Directors, including all disinterested directors, do not cause a Change in Control and are otherwise permitted hereunder.

7.9 Subordinated Debt. Make any payment in respect of any Subordinated Debt, or permit any of its Subsidiaries to make any such payment, except in compliance with the terms of such Subordinated Debt and the terms of the subordination agreement relating to such Subordinated Debt, or amend any provision of any document evidencing such Subordinated Debt, except in compliance with the terms of the subordination agreement relating to such Subordinated Debt, or amend any provision affecting Bank's rights contained in any documentation relating to the Subordinated Debt without Bank's prior written consent.

7.10 Inventory and Equipment. Store, or cause or permit any Subsidiary to store, any Inventory or the Equipment, valued, individually or in the aggregate, in excess of One Hundred Fifty Thousand Dollars (\$150,000), with a bailee, warehouseman, or similar third party unless (a) Borrower shall promptly thereafter give Bank written notice thereof identifying the names and addresses of such third parties and briefly describing the Inventory or Equipment in the possession of such third parties; and (b) the third party has been notified of Bank's security interest and Bank (i) shall have received a duly executed Collateral Access Agreement, including an acknowledgment from the third party that it is holding or will hold the Inventory or Equipment for Bank's benefit, or (ii) is in possession of the warehouse receipt, where negotiable, covering such Inventory or Equipment. Except for such locations as Bank may approve in writing, Borrower shall keep, and shall cause each of its Subsidiaries to keep, its Inventory and Equipment, valued, individually or in the aggregate, in excess of One Hundred Fifty Thousand Dollars (\$150,000), only at the locations set forth in the Schedule delivered by Borrower to Bank prior to the Closing Date, and at such other locations of which Borrower gives Bank prior written notice as required under Section 7.2 and as to which Bank files Security Instruments where needed to perfect its security interests and liens in such Inventory and Equipment and as to which (x) Bank has received a Collateral Access Agreement, and (y) Borrower has taken such actions as Bank reasonably requests to perfect and maintain the perfection and priority of Bank's Lien on the Collateral.

7.11 No Investment Company; Margin Regulation. Become or be controlled by an "investment company," within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying margin stock, or use the proceeds of any Credit Extension for such purpose.

8. EVENTS OF DEFAULT.

Any one or more of the following events shall constitute an Event of Default by Borrower under this Agreement:

8.1 Payment Default. If Borrower fails to pay any of the Obligations when due;

8.2 Covenant Default.

(a) If Borrower fails to perform any obligation under Article 6 or violates any of the covenants contained in Article 7 of this Agreement;

or

(b) If Borrower fails or neglects to perform or observe any other material term, provision, condition, covenant contained in this Agreement, in any of the Loan Documents, or in any other present or future agreement between Borrower and Bank and as to any default under such other term, provision, condition or covenant that can be cured, has failed to cure such default within ten (10) Business Days after Borrower receives notice thereof or any officer of Borrower becomes aware thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) Business Day period or cannot after diligent attempts by Borrower be cured within such ten (10) Business Day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional reasonable period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, so long as Borrower continues to diligently attempt to cure such default, and within such reasonable time period the failure to have cured such default shall not be deemed an Event of Default but no Credit Extensions will be made;

8.3 Investor Support. If Bank reasonably determines, based on indications from Borrower's existing investors, that such investors no longer intend to provide capital to Borrower in amounts and at times sufficient to enable Borrower to satisfy its obligations as they become due, including but not limited to all Obligations owing from Borrower to Bank.

8.4 Defective Perfection. If Bank shall receive at any time following the Closing Date an SOS Report indicating that except for Permitted Liens, Bank's security interest in the Collateral is not prior to all other security interests or Liens of record reflected in such SOS Report;

8.5 Attachment. If any material portion of Borrower's and/or its Subsidiaries assets is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within ten (10) days, or if Borrower and/or its Subsidiaries is enjoined, restrained, or in any way prevented by court order from continuing to conduct all or any material part of its business affairs, or if a judgment or other claim becomes a lien or encumbrance upon any material portion of Borrower's and/or its Subsidiaries assets, or if a notice of lien, levy, or assessment is filed of record with respect to any of Borrower's and/or its Subsidiaries assets by the United States Government, or any department, agency, or instrumentality thereof, or by any state, county, municipal, or governmental agency, and the same is not paid within ten (10) days after Borrower and/or its Subsidiaries receives notice thereof, provided that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by Borrower and/or its Subsidiaries (provided that no Credit Extensions will be made during such cure period);

8.6 Insolvency. If Borrower and/or its Subsidiaries becomes insolvent, or if an Insolvency Proceeding is commenced by Borrower and/or its Subsidiaries, or if an Insolvency Proceeding is commenced against Borrower and/or its Subsidiaries and is not dismissed or stayed within forty-five (45) days (provided that no Credit Extensions will be made prior to the dismissal of such Insolvency Proceeding);

8.7 Other Agreements. If there is a default or other failure to perform in any agreement to which Borrower and/or its Subsidiaries is a party with a third party or parties resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Two Hundred Fifty Thousand Dollars (\$250,000) or that could reasonably be expected to have a Material Adverse Effect;

8.8 Subordinated Debt. If Borrower and/or its Subsidiaries makes any payment on account of Subordinated Debt, except to the extent the payment is allowed under any subordination agreement entered into with Bank;

8.9 Judgments; Settlements. If one or more (a) judgments, orders, decrees or arbitration awards requiring the Borrower and/or its Subsidiaries that are not covered by insurance and which require payment in an aggregate amount of Two Hundred Fifty Thousand Dollars (\$250,000) or greater shall be rendered against Borrower and/or its Subsidiaries and the same shall not have been vacated or stayed within ten (10) days thereafter (provided that no Credit Extensions will be made prior to such matter being vacated or stayed); or (b) settlements is agreed upon by Borrower and/or its Subsidiaries for the payment by Borrower and/or its Subsidiaries of an aggregate amount of Two Hundred Fifty Thousand Dollars (\$250,000) or greater or that could reasonably be expected to have a Material Adverse Effect.

8.10 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein or in any certificate delivered to Bank by any Responsible Officer pursuant to this Agreement or to induce Bank to enter into this Agreement or any other Loan Document.

8.11 Guaranty. Except by its terms, if any guaranty of all or a portion of the Obligations (a "Guaranty") ceases for any reason to be in full force and effect, or any guarantor fails to perform any obligation under any Guaranty or a security agreement securing any Guaranty (collectively, the "Guaranty Documents"), or any event of default occurs under any Guaranty Document or any guarantor revokes or purports to revoke a Guaranty, or any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth in any Guaranty Document or in any certificate delivered to Bank in connection with any Guaranty Document, or if any of the circumstances described in Sections 8.3 through 8.9 occur with respect to any guarantor.

9. BANK'S RIGHTS AND REMEDIES.

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Bank may, at its election, without notice of its election and without demand, do any one or more of the following, all of which are authorized by Borrower:

(a) Declare all Obligations, whether evidenced by this Agreement, by any of the other Loan Documents, or otherwise, immediately due and payable (provided that upon the occurrence of an Event of Default described in Section 8.6 (Insolvency), all Obligations shall become immediately due and payable without any action by Bank);

(b) Demand that Borrower (i) deposit cash with Bank in an amount equal to the amount of any Letters of Credit remaining undrawn, as collateral security for the repayment of any future drawings under such Letters of Credit, and (ii) pay in advance all Letter of Credit fees scheduled to be paid or payable over the remaining term of the Letters of Credit, and Borrower shall promptly deposit and pay such amounts;

(c) Cease advancing money or extending credit to or for the benefit of Borrower under this Agreement or under any other agreement between Borrower and Bank;

(d) Settle or adjust disputes and claims directly with account debtors for amounts, upon terms and in whatever order that Bank reasonably considers advisable;

(e) Make such payments and do such acts as Bank considers necessary or reasonable to protect its security interest in the Collateral. Borrower agrees to assemble the Collateral if Bank so requires, and to make the Collateral available to Bank as Bank may designate. Borrower authorizes Bank to enter the premises where the Collateral is located, to take and maintain possession of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any encumbrance, charge, or lien which in Bank's determination appears to be prior or superior to its security interest and to pay all expenses incurred in connection therewith. With respect to any of Borrower's owned premises, Borrower hereby grants Bank a license to enter into possession of such premises and to occupy the same, without charge, in order to exercise any of Bank's rights or remedies provided herein, at law, in equity, or otherwise;

(f) Set off and apply to the Obligations any and all (i) balances and deposits of Borrower held by Bank, and (ii) indebtedness at any time owing to or for the credit or the account of Borrower held by Bank;

(g) Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Bank is hereby granted a license or other right, solely pursuant to the provisions of this Section 9.1, to use, without charge, Borrower's labels, patents, copyrights, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any property of a similar nature, as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section 9.1, Borrower's rights under all licenses and all franchise agreements shall inure to Bank's benefit;

(h) Sell the Collateral at either a public or private sale, or both, by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including Borrower's premises) as Bank determines is commercially reasonable, and apply any proceeds to the Obligations in whatever manner or order Bank deems appropriate. Bank may sell the Collateral without giving any warranties as to the Collateral. Bank may specifically disclaim any warranties of title or the like. This procedure will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral. If Bank sells any of the Collateral upon credit, Borrower will be credited only with payments actually made by the purchaser, received by Bank, and applied to the indebtedness of the purchaser. If the purchaser fails to pay for the Collateral, Bank may resell the Collateral and Borrower shall be credited with the proceeds of the sale;

(i) Bank may credit bid and purchase at any public sale;

(j) Apply for the appointment of a receiver, trustee, liquidator or conservator of the Collateral, without notice and without regard to the adequacy of the security for the Obligations and without regard to the solvency of Borrower, any guarantor or any other Person liable for any of the Obligations; and

(k) Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by Borrower.

Bank may comply with any applicable state or federal law requirements in connection with a disposition of the Collateral and compliance will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral.

9.2 Power of Attorney. Effective only upon the occurrence and during the continuance of an Event of Default, Borrower hereby irrevocably appoints Bank (and any of Bank's designated officers, agents or employees) as Borrower's true and lawful attorney, with full power of substitution, to: (a) send requests for verification of Accounts or notify account debtors of Bank's security interest and Liens in the Accounts, Inventory and other Collateral; (b) endorse Borrower's name on any checks or other forms of payment or security that may come into Bank's possession; (c) sign Borrower's name on any invoice or bill of lading relating to any Account, drafts against account debtors, schedules and assignments of Accounts, verifications of Accounts, and notices to account debtors; (d) dispose of any Collateral; (e) make, settle, and adjust all claims under and decisions with respect to Borrower's policies of insurance; (f) settle and adjust disputes and claims respecting the accounts directly with account debtors, for amounts and upon terms which Bank determines to be reasonable; (g) transfer all or any part of the Collateral into the name of Bank or a third party to the extent permitted under the Code; (h) file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Collateral without the signature of Borrower where permitted by law; (i) execute and do all such assurances, acts and things which Borrower is required, but fails to do under the covenants and provisions of the Loan Documents; (j) to take any and all such actions as Bank may reasonably determine to be necessary or advisable for the purpose of maintaining, preserving or protecting the Collateral or any of the rights, remedies, powers or privileges of Bank under this Agreement or the other Loan Documents; and (k) sign Borrower's name on any documents or Security Instruments necessary to perfect or continue the perfection of, or maintain the priority of, Bank's security interest in the Collateral; provided Bank may exercise such power of attorney to sign the name of Borrower on any of the documents, and take any of the actions, described in clauses (h) through (k) above, regardless of whether an Event of Default has occurred or is continuing. The appointment of Bank as Borrower's attorney in fact, and each and every one of Bank's rights and powers, being coupled with an interest, is irrevocable until all of the Obligations (other than inchoate indemnity obligations as to which no claim has been asserted or is known to exist) have been fully repaid and performed and all of Bank's obligations to provide Credit Extensions or other financial accommodations to Borrower under this Agreement or any of the other Loan Documents shall have terminated.

9.3 Accounts Collection. At any time after the occurrence and during the continuation of an Event of Default, Bank may notify any Person owing funds to Borrower of Bank's security interest in such funds and verify the amount of such Account. Borrower shall collect all amounts owing to Borrower for Bank, receive in trust all payments as Bank's trustee, and immediately deliver such payments to Bank in their original form as received from the account debtor, with proper endorsements for deposit.

9.4 Bank Expenses. If Borrower fails to pay any amounts or furnish any required proof of payment due to third persons or entities, as required under the terms of this Agreement, then Bank may do any or all of the following after reasonable notice to Borrower: (a) make payment of the same or any part thereof; (b) set up such reserves under any revolving line of credit provided by Bank as Bank deems necessary to protect Bank from the exposure created by such failure; or (c) obtain and maintain insurance policies of the type discussed in Section 6.5 of this Agreement, and take any action with respect to such policies as Bank deems prudent. Any amounts so paid or deposited by Bank shall constitute Bank Expenses, shall be immediately due and payable, and shall bear interest at the then applicable rate hereinabove provided, and shall be secured by the Collateral. Any payments made by Bank shall not constitute an agreement by Bank to make similar payments in the future or a waiver by Bank of any Event of Default under this Agreement.

9.5 Bank's Liability for Collateral. Bank has no obligation to clean up or otherwise prepare the Collateral for sale. All risk of loss, damage or destruction of the Collateral shall be borne by Borrower.

9.6 No Obligation to Pursue Others. Bank has no obligation to attempt to satisfy the Obligations by collecting them from any other Person liable for them and Bank may release, modify or waive any collateral provided by any other Person to secure any of the Obligations, all without affecting Bank's rights against Borrower. Borrower waives any right it may have to require Bank to pursue any other Person for any of the Obligations.

9.7 Remedies Cumulative. Bank's rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Bank shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No exercise by Bank of one right or remedy shall be deemed an election, and no waiver by Bank of any Event of Default on Borrower's part shall be deemed a continuing waiver. No delay by Bank shall constitute a waiver, election, or acquiescence by it. No waiver by Bank shall be effective unless made in a written document signed on behalf of Bank and then shall be effective only in the specific instance and for the specific purpose for which it was given. Borrower expressly agrees that this Section 9.7 may not be waived or modified by Bank by course of performance, conduct, estoppel or otherwise.

9.8 Demand; Protest. Except as otherwise provided in this Agreement, Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment and any other notices relating to the Obligations.

10. NOTICES.

Unless otherwise provided in this Agreement, all notices or demands by any party relating to this Agreement or any other agreement entered into in connection herewith shall be in writing and (except for financial statements and other informational documents which may be sent by first-class mail, postage prepaid) shall be personally delivered or sent by a recognized overnight delivery service, certified mail, postage prepaid, return receipt requested, or by telefacsimile to Borrower or to Bank, as the case may be, at its addresses set forth below:

If to Borrower:

SERES HEALTH, INC.
161 First Street
Cambridge, MA 02142
Attn: Chief Executive Officer
FAX: (617) 868-1115

with copies to:

Latham & Watkins LLP
John Hancock Tower, 20th Floor
200 Clarendon Street
Boston, MA 02116
Attn: Peter Handrinos
FAX: (617) 948-6001

Latham & Watkins LLP
505 Montgomery Street, 20th Floor
San Francisco, CA 94111
Attn: Haim Zaltzman
FAX: (415) 395-8095

If to Bank:

Comerica Bank
M/C 7578
39200 Six Mile Rd.
Livonia, MI 48152
Attn: National Documentation Services

with a copy to:

Comerica Bank
100 Federal Street, 28th Floor
Boston, MA 02110
Attn: Paula Howell & Jason Pan
FAX: (617) 757-6351

Notwithstanding the foregoing, however, the failure by the Bank to deliver a copy of a notice or demand to Borrower's counsel shall not affect the validity or efficacy of such notice or demand if otherwise sent to Borrower in accordance with this Section 10. The parties hereto may change the address at which they are to receive notices hereunder, by notice in writing in the foregoing manner given to the other.

11. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER.

This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of California, without regard to principles of conflicts of law. Each of Borrower and Bank hereby submits to the exclusive jurisdiction of the State and Federal courts located in the County of Santa Clara, State of California. THE UNDERSIGNED ACKNOWLEDGE THAT THE RIGHT TO TRIAL BY JURY IS A CONSTITUTIONAL ONE, BUT THAT IT MAY BE WAIVED UNDER CERTAIN CIRCUMSTANCES. TO THE EXTENT PERMITTED BY LAW, EACH PARTY, AFTER CONSULTING (OR HAVING HAD THE OPPORTUNITY TO CONSULT) WITH COUNSEL OF ITS, HIS OR HER CHOICE, KNOWINGLY AND VOLUNTARILY, AND FOR THE MUTUAL BENEFIT OF ALL PARTIES, WAIVES ANY RIGHT TO TRIAL BY JURY IN THE EVENT OF LITIGATION ARISING OUT OF OR RELATED TO THIS AGREEMENT OR ANY OTHER DOCUMENT, INSTRUMENT OR AGREEMENT BETWEEN THE UNDERSIGNED PARTIES.

12. REFERENCE PROVISION.

12.1 In the event the Jury Trial Waiver set forth above is not enforceable, the parties elect to proceed under this Judicial Reference Provision.

12.2 With the exception of the items specified in Section 12.3, below, any controversy, dispute or claim (each, a "Claim") between the parties arising out of or relating to this Agreement or any other document, instrument or agreement between the undersigned parties (collectively in this Section, the "Comerica Documents"), will be resolved by a reference proceeding in California in accordance with the provisions of Sections 638 et seq. of the California Code of Civil Procedure ("CCP"), or their successor sections, which shall constitute the exclusive remedy for the resolution of any Claim, including whether the Claim is subject to the reference proceeding. Except as otherwise provided in the Comerica Documents, venue for the reference proceeding will be in the Superior Court in the County where the real property involved in the action, if any, is located or in a County where venue is otherwise appropriate under applicable law (the "Court").

12.3 The matters that shall not be subject to a reference are the following: (i) foreclosure of any security interests in real or personal property, (ii) exercise of self-help remedies (including, without limitation, set-off), (iii) appointment of a receiver and (iv) temporary, provisional or ancillary remedies (including, without limitation, writs of attachment, writs of possession, temporary restraining orders or preliminary injunctions). This Agreement does not limit the right of any party to exercise or oppose any of the rights and remedies described in clauses (i) and (ii) or to seek or oppose from a court of competent jurisdiction any of the items described in clauses (iii) and (iv). The exercise of, or opposition to, any of those items does not waive the right of any party to a reference pursuant to this Agreement.

12.4 The referee shall be a retired Judge or Justice selected by mutual written agreement of the parties. If the parties do not agree within ten (10) days of a written request to do so by any party, then, upon request of any party, the referee shall be selected by the Presiding Judge of the Court (or his or her representative). A request for appointment of a referee may be heard on an ex parte or expedited basis, and the parties agree that irreparable harm would result if ex parte relief is not granted.

12.5 The parties agree that time is of the essence in conducting the reference proceedings. Accordingly, the referee shall be requested, subject to change in the time periods specified herein for good cause shown, to (i) set the matter for a status and trial-setting conference within fifteen (15) days after the date of selection of the referee, (ii) if practicable, try all issues of law or fact within one hundred twenty (120) days after the date of the conference and (iii) report a statement of decision within twenty (20) days after the matter has been submitted for decision.

12.6 The referee will have power to expand or limit the amount and duration of discovery. The referee may set or extend discovery deadlines or cutoffs for good cause, including a party's failure to provide requested discovery for any reason whatsoever. Unless otherwise ordered based upon good cause shown, no party shall be entitled to "priority" in conducting discovery, depositions may be taken by either party upon seven (7) days written notice, and all other discovery shall be responded to within fifteen (15) days after service. All disputes relating to discovery which cannot be resolved by the parties shall be submitted to the referee whose decision shall be final and binding.

12.7 Except as expressly set forth in this Agreement, the referee shall determine the manner in which the reference proceeding is conducted including the time and place of hearings, the order of presentation of evidence, and all other questions that arise with respect to the course of the reference proceeding. All proceedings and hearings conducted before the referee, except for trial, shall be conducted without a court reporter, except that when any party so requests, a court reporter will be used at any hearing conducted before the referee, and the referee will be provided a courtesy copy of the transcript. The party making such a request shall have the obligation to arrange for and pay the court reporter. Subject to the referee's power to award costs to the prevailing party, the parties will equally share the cost of the referee and the court reporter at trial.

12.8 The referee shall be required to determine all issues in accordance with existing case law and the statutory laws of the State of California. The rules of evidence applicable to proceedings at law in the State of California will be applicable to the reference proceeding. The referee shall be empowered to enter equitable as well as legal relief, enter equitable orders that will be binding on the parties and rule on any motion which would be authorized in a court proceeding, including without limitation motions for summary judgment or summary adjudication. The referee shall issue a decision at the close of the reference proceeding which disposes of all claims of the parties that are the subject of the reference. Pursuant to CCP § 644, such decision shall be entered by the Court as a judgment or an order in the same manner as if the action had been tried by the Court and any such decision will be final, binding and conclusive. The parties reserve the right to appeal from the final judgment or order or from any appealable decision or order entered by the referee. The parties reserve the right to findings of fact, conclusions of laws, a written statement of decision, and the right to move for a new trial or a different judgment, which new trial, if granted, is also to be a reference proceeding under this provision.

12.9 If the enabling legislation which provides for appointment of a referee is repealed (and no successor statute is enacted), any dispute between the parties that would otherwise be determined by reference procedure will be resolved and determined by arbitration. The arbitration will be conducted by a retired judge or Justice, in accordance with the California Arbitration Act §1280 through §1294.2 of the CCP as amended from time to time. The limitations with respect to discovery set forth above shall apply to any such arbitration proceeding.

12.10 THE PARTIES RECOGNIZE AND AGREE THAT ALL CONTROVERSIES, DISPUTES AND CLAIMS RESOLVED UNDER THIS REFERENCE PROVISION WILL BE DECIDED BY A REFEREE AND NOT BY A JURY. AFTER CONSULTING (OR HAVING HAD THE OPPORTUNITY TO CONSULT) WITH COUNSEL OF ITS, HIS OR HER OWN CHOICE, EACH PARTY KNOWINGLY AND VOLUNTARILY, AND FOR THE MUTUAL BENEFIT OF ALL PARTIES, AGREES THAT THIS REFERENCE PROVISION WILL APPLY TO ANY CONTROVERSY, DISPUTE OR CLAIM BETWEEN OR AMONG THEM ARISING OUT OF OR IN ANY WAY RELATED TO, THIS AGREEMENT OR THE OTHER COMERICA DOCUMENTS.

13. GENERAL PROVISIONS.

13.1 Successors and Assigns. This Agreement shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties and shall bind all Persons who become bound as a debtor to this Agreement; provided, however, that neither this Agreement nor any rights hereunder may be assigned by Borrower without Bank's prior written consent, which consent may be granted or withheld in Bank's sole discretion. Bank shall have the right without the consent of or notice to Borrower to sell, transfer, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights and benefits hereunder.

13.2 Indemnification. Borrower shall defend, indemnify and hold harmless Bank and its officers, employees, and agents against: (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with the Collateral or the transactions contemplated by this Agreement and/or the other Loan Documents; and (b) all losses or Bank Expenses in any way suffered, incurred, or paid by Bank, its officers, employees and agents as a result of or in any way arising out of, following, or consequential to transactions between Bank and Borrower whether under this Agreement, or otherwise (including without limitation reasonable attorneys' fees and expenses), except for losses caused by Bank's gross negligence or willful misconduct.

13.3 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

13.4 Severability of Provisions. Each provision of this Agreement shall be severable from every other provision of this Agreement for the purpose of determining the legal enforceability of any specific provision.

13.5 Correction of Loan Documents. Bank may correct patent errors and fill in any blanks in this Agreement and the other Loan Documents consistent with the agreement of the parties.

13.6 Amendments in Writing, Integration. This Agreement cannot be amended or terminated orally. All amendments to or terminations of this Agreement or the other Loan Documents must be in writing signed by the parties. All prior agreements, understandings, representations, warranties, and negotiations between the parties hereto with respect to the subject matter of this Agreement and the other Loan Documents, if any, are merged into this Agreement and the Loan Documents.

13.7 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement.

13.8 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations (other than inchoate indemnity obligations as to which no claim has been asserted or is known to exist) remain outstanding or Bank has any obligation to make any Credit

Extension to Borrower. The obligations of Borrower to indemnify Bank with respect to the expenses, damages, losses, costs and liabilities described in Section 13.2 shall survive, notwithstanding termination of this Agreement, until all applicable statute of limitations periods with respect to actions that may be brought against Bank have run.

13.9 Confidentiality. In handling any confidential information, Bank and all employees and agents of Bank shall exercise the same degree of care that Bank exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public information thereby received or received pursuant to this Agreement except that disclosure of such information may be made (i) to the subsidiaries or Affiliates of Bank in connection with their present or prospective business relations with Borrower, (ii) to prospective transferees, participants, or purchasers of any interest in the Obligations that are subject to confidentiality provisions substantially similar to the provisions of this Section 13.9 or that have agreed with Bank to comply with this Section 13.9, (iii) as required by law, regulations, rule or order, subpoena, judicial order or similar order, (iv) as may be required in connection with the examination, audit or similar investigation of Bank, (v) to Bank's accountants, auditors and regulators, (vi) as Bank may determine in connection with the enforcement of any remedies under any of the Loan Documents, and (vii) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. Confidential information hereunder shall not include information that either: (a) is in the public domain or in the knowledge or possession of Bank when disclosed to Bank, or becomes part of the public domain after disclosure to Bank through no fault of Bank; or (b) is disclosed to Bank by a third party, provided Bank does not have actual knowledge that such third party is prohibited from disclosing such information.

13.10 Termination. Upon written request of Borrower to Bank, this Agreement shall terminate on the indefeasible payment in full in cash of the Obligations (other than inchoate indemnity obligations as to which no claim has been asserted or is known to exist), the deposit of cash collateral with respect to all contingent Obligations (excluding inchoate indemnification obligations as to which no claim has been asserted) in amounts and on terms and conditions and with parties satisfactory to Bank, and the full and final termination of all of Bank's obligations and commitments to make Credit Extensions. Promptly after any such termination and written request of Borrower to Bank, Bank shall at Borrower's sole cost and expense, execute and deliver to Borrower a payoff letter on Bank's standard form and release the security interest in the Collateral granted under this Agreement.

[Remainder of Page Left Blank]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

SERES HEALTH, INC.

By: /s/ David Berry

Name: David Berry

Title: President

COMERICA BANK

By: /s/ Jason Pan

Name: Jason Pan

Title: Vice President

EXHIBIT A

DEFINITIONS

“Accounts” means all presently existing and hereafter arising accounts, contract rights, payment intangibles and all other forms of obligations owing to Borrower arising out of the sale or lease of goods (including, without limitation, the licensing of software and other technology), the licensing, sale or other transfer of any intellectual property of Borrower or any of its Subsidiaries, or the rendering of services by Borrower, whether or not earned by performance, and including, without limitation, all accounts, contract rights and payment intangibles of Borrower under or in respect of term license agreements, subscription license agreements and maintenance contracts, and also including all accounts, payment intangibles and other forms of obligations owing to Borrower under any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by Borrower and Borrower’s Books relating to any of the foregoing.

“Affiliate” means, with respect to any Person, any Person that owns or controls directly or indirectly such Person, any Person that controls or is controlled by or is under common control with such Person, and each of such Person’s senior executive officers, directors, and partners.

“Bank Expenses” means all costs or expenses of Bank, or any other holder or owner of the Loan Documents (including, without limit, court costs, legal expenses and reasonable attorneys’ fees and expenses, whether generated in-house or by outside counsel, whether or not suit is instituted, and, if suit is instituted, whether at trial court level, appellate court level, in a bankruptcy, probate or administrative proceeding or otherwise) incurred in connection with the preparation, negotiation, execution, delivery, amendment, administration, performance and enforcement of the Loan Documents, or incurred in collecting, attempting to collect under the Loan Documents or the Obligations, or incurred in defending the Loan Documents, or incurred in any other matter or proceeding relating to the Loan Documents or the Obligations; and reasonable Collateral audit fees, in each case whether incurred before, during and after an Insolvency Proceeding.

“Borrower State” means Delaware, the state under whose laws Borrower is organized.

“Borrower’s Books” means all of Borrower’s books and records including: ledgers; records concerning Borrower’s assets or liabilities, the Collateral, business operations or financial condition; and all computer programs, or tape files, and the equipment, containing such information.

“Business Day” means any day that is not a Saturday, Sunday, or other day on which banks in the State of California are authorized or required to close.

“Cash” means unrestricted cash and cash equivalents.

“Change in Control” means the occurrence of any one or more of the foregoing:

(a) prior to the Parent Holding Company Acquisition: (i) any transaction or series of related transactions in which any “person” or “group” (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934), other than Flagship, becomes the “beneficial owner” (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of a sufficient number of shares of all classes of Equity Interests then outstanding of Borrower ordinarily entitled to vote in the election of directors, empowering such “person” or “group” to elect a majority of the Board of Directors of Borrower, who did not have such power before such transaction, or (ii) Borrower’s existing venture capital investors ceasing to own and control at least twenty percent (20%) of the voting power of all classes of Borrower’s Equity Interests entitled to vote for the election of directors (other than as a result of the Initial Public Offering); or

(b) following the Parent Holding Company Acquisition: (i) any transaction or series of related transactions in which any “person” or “group” (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934), other than Flagship, becomes the “beneficial owner” (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of a sufficient number of shares of all classes of Equity Interests then

outstanding of Parent Holding Company ordinarily entitled to vote in the election of directors, managers or similar governing authority, empowering such “person” or “group” to elect a majority of the Board of Directors (or similar governing authority) of Parent Holding Company, who did not have such power before such transaction, or (ii) Flagship ceasing to own and control at least twenty percent (20%) of the voting power of all classes of Parent Holding Company’s Equity Interests entitled to vote for the election of directors or similar governing body or authority (other than as a result of the Initial Public Offering), or (iii) Parent Holding Company ceasing to own and control one hundred percent (100%) of the voting power of all classes of Borrower’s Equity Interests entitled to vote for the election of directors.

Notwithstanding the foregoing, subject to compliance with Section 6.11 and the requirements of Section 1.5 of the Warrant, the Parent Holding Company Acquisition shall not be deemed to be a Change in Control.

“Chief Executive Office State” means Massachusetts, where Borrower’s chief executive office is located.

“Closing Date” means the date of this Agreement.

“Code” means the California Uniform Commercial Code as amended or supplemented from time to time.

“Collateral” means the property described on Exhibit B attached hereto and all Negotiable Collateral to the extent not described on Exhibit B.

“Collateral Access Agreement” means an agreement in form and substance satisfactory to Bank in its reasonable discretion, pursuant to which a mortgagee or lessor of real property on which Collateral is stored or otherwise located, or a warehouseman, processor, contract manufacturer, equipment holder, co-location facility or other bailee of Inventory, Equipment or other property owned by Borrower, that acknowledges the Liens of Bank and waives any Liens held by such Person on such Inventory, Equipment or other property and, includes such other agreements with respect to the Collateral, including agreements relating to access to the Collateral, as Bank may require in its sole discretion, as the same may be amended, restated or otherwise modified from time to time.

“Collateral State” means the state or states where the Collateral is located, which is Massachusetts.

“Contingent Obligation” means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any indebtedness, lease, dividend, letter of credit or other obligation of another, including, without limitation, any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designed to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term “Contingent Obligation” shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

“Copyrights” means any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held.

“Credit Extension” means each Growth Capital Advance or any other extension of credit by Bank to or for the benefit of Borrower hereunder.

“Environmental Laws” means all laws, rules, regulations, orders and the like issued by any federal state, local foreign or other governmental or quasi-governmental authority or any agency pertaining to the environment or to any hazardous materials or wastes, toxic substances, flammable, explosive or radioactive materials, asbestos or other similar materials.

“Equipment” means all present and future machinery, equipment, tenant improvements, furniture, fixtures, vehicles, tools, parts and attachments in which Borrower has any interest.

“Equity Interests” means, with respect to any Person, any of the shares of capital stock of (or other ownership, membership or profit interests in) such Person, any of the warrants, options or other rights for the purchase or acquisition from such Person of shares of capital stock of (or other ownership, membership or profit interests in) such Person, any of the securities convertible into or exchangeable for shares of capital stock of (or other ownership, membership or profit interests in) such Person or warrants, rights or options for the purchase or acquisition from such Person of such shares (or such other interests), and any of the other ownership, membership or profit interests in such Person (including partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are outstanding on any date of determination.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended, and the regulations thereunder.

“Event of Default” has the meaning assigned in Article 8.

“Excluded Foreign Subsidiary” means any Foreign Subsidiary that is a controlled foreign corporation (as defined in the IRC) in respect of which either (a) the pledge of all of the voting Equity Interests of such Foreign Subsidiary as Collateral or (b) the guaranteeing by such Foreign Subsidiary of the Obligations, would result in material adverse tax consequences to Borrower.

“Flagship” means, collectively, FLAGSHIP VENTURES FUND IV, L.P, a Delaware limited partnership, and its affiliated investment funds.

“Foreign Subsidiary” means, in relation to any Person, any Subsidiary of that Person that is organized under the laws of a jurisdiction other than the United States of America or any of the States (or the District of Columbia) thereof.

“Final Payment” is a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest) due on the earliest to occur of (a) the Growth Capital Maturity Date, or (b) the acceleration of any Growth Capital Advances, or (c) the prepayment of any Growth Capital Advance pursuant to Section 2.1(c)(iv) or (v), equal to Sixty Thousand Dollars (\$60,000).

“GAAP” means generally accepted accounting principles, consistently applied, as in effect from time to time in the United States of America.

“Governmental Authority” means the Government of Canada, the United States of America, any State thereof or the District of Columbia, any other nation or any political subdivision thereof, whether provincial, state, territorial or local, and any agency, authority, instrumentality, regulatory body, court, central bank, fiscal or monetary authority or other authority regulating financial institutions, and any other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government, including the Bank Committee on Banking Regulation and Supervisory Practices of the Bank of International Settlements.

“Growth Capital Advance(s)” means a cash advance or cash advances under the Growth Capital Line.

“Growth Capital Availability End Date” means August 31, 2014.

“Growth Capital Line” means a Credit Extension of up to Three Million Dollars (\$3,000,000).

“Growth Capital Maturity Date” means February 1, 2017.

“Initial Public Offering” means the closing of the initial firm commitment underwritten offering of Borrower’s common stock pursuant to a registration statement under the Securities Act of 1933 filed with, and declared effective by, the Securities and Exchange Commission.

“Indebtedness” means (a) all indebtedness for borrowed money or the deferred purchase price of property or services, including without limitation reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, and (d) all Contingent Obligations.

“Insolvency Proceeding” means any proceeding or case commenced by or against any Person or entity under any provision of the United States Bankruptcy Code, as amended, or under any other bankruptcy or insolvency law, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extension generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“Intellectual Property” means all of Borrower’s Copyrights, Patents, Trademarks, servicemarks and applications therefor, now owned or hereafter acquired, and any claims for damages by way of any past, present and future infringement of any of the foregoing.

“Inventory” means all present and future inventory in which Borrower has any interest, including any returns upon any accounts or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above, and Borrower’s Books relating to any of the foregoing.

“Investment” means any beneficial ownership of (including stock, partnership or limited liability company interest or other securities) any Person, or any loan, advance or capital contribution to any Person.

“IRC” means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

“Letter of Credit” means a commercial or standby letter of credit or similar undertaking issued by Bank at Borrower’s request.

“Lien” means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

“Loan Documents” means, collectively, this Agreement, any note or notes executed by Borrower, and any other document, instrument or agreement entered into in connection with this Agreement, all as amended or extended from time to time. For the sake of clarity, Loan Documents shall include all present or future agreements by Borrower with or for the benefit of Bank in connection with bank products, credit services, and/or financial accommodations previously, now, or hereafter provided to Borrower by Bank including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services as any such products or services may be identified in Bank’s various agreements related thereto, all as amended, restated, or otherwise modified.

“Material Adverse Effect” means (i) a material adverse change in Borrower’s business or financial condition, or (ii) a material impairment in the prospect of repayment of all or any portion of the Obligations or in otherwise performing Borrower’s obligations under the Loan Documents, (iii) a material impairment in the perfection, value or priority of Bank’s security interests in the Collateral or any security provided by any guarantor.

“Negotiable Collateral” means all of Borrower’s present and future letters of credit of which it is a beneficiary, drafts, instruments (including promissory notes), securities, documents of title, and chattel paper, and Borrower’s Books relating to any of the foregoing.

“Obligations” means all debt, principal, interest, Bank Expenses, the Final Payment and other amounts owed to Bank by Borrower pursuant to this Agreement or any other agreement, whether absolute or contingent, due or to become due, now existing or hereafter arising, including any interest that accrues after the commencement of an Insolvency Proceeding and including any debt, liability, or obligation owing from Borrower to others that Bank may have obtained by assignment or otherwise but excluding any obligations under the Warrant.

“Parent Holding Company” means a limited liability company duly formed and organized and validly existing under the laws of a state of the United States for the sole purpose of acquiring and holding the Equity Interests of Borrower that (a) holds no assets other than assets incidental to the ownership of such Equity Interests of Borrower, and (b) conducts no other business or financial operations.

“Parent Holding Company Acquisition” means the acquisition by a Parent Holding Company of all of the Equity Interests of Borrower, such that Borrower becomes a wholly-owned Subsidiary of such Parent Holding Company, and the voting and non-voting Equity Interests of the Parent Holding Company following such transaction are held by Borrower’s former stockholders in substantially the same percentages of ownership as such stockholders held Borrower’s Equity Interests immediately prior to such transaction.

“Patents” means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

“Periodic Payments” means all installments or similar recurring payments that Borrower may now or hereafter become obligated to pay to Bank pursuant to the terms and provisions of any instrument, or agreement now or hereafter in existence between Borrower and Bank.

“Permitted Indebtedness” means:

- (a) Indebtedness of Borrower in favor of Bank arising under this Agreement or any other Loan Document;
- (b) Indebtedness existing on the Closing Date and disclosed in the Schedule;
- (c) Indebtedness of Borrower not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate outstanding at any time secured by a lien described in clause (c) of the defined term “Permitted Liens,” provided such Indebtedness does not exceed the lesser of the cost or fair market value of the equipment financed with such Indebtedness;
- (d) Subordinated Debt;
- (e) Indebtedness to trade creditors incurred in the ordinary course of business, including Indebtedness incurred in the ordinary course of business with corporate credit cards with Bank; and
- (f) extensions, refinancings and renewals of any items of Permitted Indebtedness described in clauses (a) through (c) above, provided that the principal amount is not increased or the terms modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be;
- (g) Indebtedness that also constitutes an intercompany loan under clause (e) of the definition of Permitted Investment;
- (h) reimbursement obligations not to exceed Fifty Thousand Dollars (\$50,000) in the aggregate at any time, in connection with letters of credit that are secured by cash or cash equivalents and issued on behalf of a Borrower or a Subsidiary thereof with respect to leases or subleases of real property granted in the ordinary course of Borrower’s business (or, if referring to another Person, in the ordinary course of such Person’s business); and
- (i) other Indebtedness in an amount not to exceed One Hundred Thousand Dollars (\$100,000) at any time outstanding.

“Permitted Investment” means:

- (a) Investments existing on the Closing Date disclosed in the Schedule;
- (b) (i) Marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one (1) year from the date of acquisition thereof, (ii) commercial paper maturing no more than one (1) year from the date of creation thereof and currently having rating of at least A-2 or P-2 from either Standard & Poor’s Rating Services or Moody’s Investors Service, Inc., (iii) Bank’s certificates of deposit maturing no more than one (1) year from the date of investment therein, and (iv) Bank’s money market accounts;
- (c) Repurchases of stock from former employees or directors of Borrower under the terms of customary board-approved stock repurchase agreements to the extent permitted under Section 7.6;
- (d) Investments accepted in connection with Permitted Transfers;
- (e) Investments of wholly-owned Subsidiaries of Borrower in or to other wholly-owned Subsidiaries of Borrower or Borrower and Investments by Borrower in its wholly-owned Subsidiaries not to exceed Five Hundred Thousand Dollars (\$500,000) in the aggregate in any fiscal year;
- (f) Investments not to exceed One Hundred Twenty-Five Thousand Dollars (\$125,000) in the aggregate in any fiscal year consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plan agreements approved by Borrower’s Board of Directors;
- (g) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of Borrower’s business;
- (h) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business, provided that this subparagraph (h) shall not apply to Investments of Borrower in any Subsidiary;
- (i) Joint ventures, strategic alliances or research and development collaborations with non-Affiliated third parties consistent with the ordinary course of business in Borrower’s industry, provided that any cash Investments by Borrower do not exceed Three Hundred Fifty Thousand Dollars (\$350,000) in the aggregate in any fiscal year; and
- (j) Additional Investments, other than Investments in Subsidiaries, that do not exceed \$200,000 in the aggregate during the term of this Agreement.

“Permitted Liens” means the following:

- (a) Any Liens existing on the Closing Date and disclosed in the Schedule (excluding Liens to be satisfied with the proceeds of the Credit Extensions) or arising under this Agreement or the other Loan Documents;
- (b) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings and for which Borrower maintains adequate reserves, provided the same have no priority over any of Bank’s security interests;
- (c) Liens securing Permitted Indebtedness not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in aggregate principal amount outstanding at any time (i) upon or in any Equipment (other than Equipment financed by Bank) acquired or held by Borrower or any of its Subsidiaries to secure the purchase price of such Equipment or indebtedness incurred solely for the purpose of financing the acquisition or lease of

such Equipment, or (ii) existing on such Equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such Equipment;

- (d) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clauses (a) through (c) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase;
- (e) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Sections 8.4 (Attachment) or 8.8 (Judgments; Settlements);
- (f) Liens in favor of other financial institutions arising in connection with Borrower's deposit accounts held at such institutions to secured standard fees for deposit services charged by, but not financing made available by such institutions, provided that Bank has a perfected, first-priority security interest in the amounts held in such deposit accounts and Borrower is in compliance with the requirements of Section 6.6 with respect to such accounts;
- (g) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Fifty Thousand Dollars (\$50,000) and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;
- (h) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);
- (i) Licenses for the use of the property of Borrower or its Subsidiaries permitted under clause (b) of the definition of Permitted Transfer;
- (j) Liens securing reimbursement obligations not to exceed Fifty Thousand Dollars (\$50,000) in the aggregate at any time, in connection with letters of credit issued with respect to leases or subleases of real property granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business); and
- (k) Liens in favor of Bank securing Indebtedness for corporate credit cards issued by Bank.

"Permitted Transfer" means the conveyance, sale, lease, transfer or disposition by Borrower or any Subsidiary of:

- (a) Inventory in the ordinary course of business;
- (b) (i) Non-exclusive licenses for the use of the Intellectual Property of Borrower or its Subsidiaries in the ordinary course of business, and (ii) licenses of Intellectual Property of Borrower or its Subsidiaries granted in the ordinary course of business that could not result in a legal transfer of title of the licensed property that (A) may be exclusive in respects other than territory and that may be exclusive as to territory only as to discreet geographical areas outside of the United States or (B) if not limited in geographical scope, whereby Borrower only exclusively licenses its platform Intellectual Property for use in connection with the licensee's products; provided that with respect to each licenses described in clause (i) or (ii) above, such license not interfere in any material respect with the business of Borrower and its Subsidiaries taken as a whole;
- (c) Worn-out or obsolete Equipment not financed by Bank;

- (d) transfers of cash that constitute Permitted Investments; payments of money by Borrower for its ordinary course business operating expenses (such as the payment, in each case in the ordinary course of Borrower's business, of payroll, rent, debt service, accounts payable, payments to vendors or other third parties for goods provided or services rendered to or on behalf of Borrower; and payments of money by any Subsidiary of Borrower for such Subsidiary's own ordinary course business operating expenses (such as the payment, in each case in the ordinary course of such Subsidiary's business, of payroll, rent, debt service, accounts payable, payments to vendors or other third parties for goods provided or services rendered to or on behalf of such Subsidiary); or
- (e) Other assets of Borrower or its Subsidiaries (other than Intellectual Property) that do not in the aggregate exceed One Hundred Thousand Dollars (\$100,000) during any fiscal year.

"Person" means any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

"Pricing Addendum" means that certain Prime Referenced Rate Addendum to Loan and Security Agreement, dated as of the Closing Date, by and between Borrower and Bank, as the same may be amended, modified, supplemented, extended or restated from time to time.

"Prohibited Territory" means any person or country listed by the Office of Foreign Assets Control of the United States Department of Treasury as to which transactions between a United States Person and that territory are prohibited.

"Responsible Officer" means each of the Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer and the Controller of Borrower.

"Restricted Agreement" is any material license or other material agreement (other than over-the-counter software that is commercially available to the public) to which Borrower is a party or under which Borrower is bound (including licenses and agreements under which Borrower is the licensee): (a) that prohibits or otherwise restricts Borrower from assigning to Bank, or granting to Bank a Lien in, Borrower's interest in such license or agreement, the rights arising thereunder or any other property, or (b) for which a default under or termination of such license or contract could interfere with the Bank's right to use, license, sell or collect any Collateral or otherwise exercise its rights and remedies with respect to the Collateral under the Loan Documents or applicable law.

"Schedule" means the schedule of exceptions attached hereto and approved by Bank, if any.

"Security Instrument" means any security agreement, assignment, pledge agreement, financing or other similar statement or notice, continuation statement, other agreement or instrument, or any amendment or supplement to any thereof, creating, governing or providing for, evidencing or perfecting or maintaining the priority of any security interest or Lien.

"Shares" means one hundred percent (100%) of the issued and outstanding capital stock, membership units or other securities owned or held of record by Borrower in any Subsidiary of Borrower.

"SOS Reports" means the official reports from the Secretaries of State of each Collateral State, Chief Executive Office State and the Borrower State and other applicable federal, state or local government offices identifying all current security interests filed in the Collateral and Liens of record as of the date of such report.

"Subordinated Debt" means Indebtedness incurred by Borrower that is subordinated in writing to the Obligations owing by Borrower to Bank on terms reasonably satisfactory to Bank (and identified as being such by Borrower and Bank), including without limiting the generality of the foregoing, subordination of such Indebtedness in right of payment to the prior indefeasible payment in full, in cash, of the Obligations, the subordination of the priority of any Lien at any time securing such Indebtedness to Bank's Lien, and prohibitions on the exercise of any rights or remedies of the holder of such Indebtedness against Borrower or any of Borrower's property pursuant to a written subordination agreement executed and delivered by Bank.

“Subsidiary” means, with respect to any Person, any corporation, partnership or, limited liability company or joint venture in which (i) any general partnership interest or (ii) more than fifty percent (50%) of the stock, limited liability company interest, joint venture interest or other Equity Interest of which by the terms thereof has the ordinary voting power to elect the Board of Directors, managers, trustees or similar governing body of the entity, at the time as of which any determination is being made, is owned or controlled by such Person, either directly or through an Affiliate. Unless otherwise stated, references herein to a “Subsidiary” are to Subsidiaries of Borrower.

“Trademarks” means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

“Warrant” means that certain Warrant to Purchase Stock issued on the Closing Date by Borrower to Bank.

DEBTOR: SERES HEALTH, INC.

SECURED PARTY: COMERICA BANK

EXHIBIT B

COLLATERAL DESCRIPTION ATTACHMENT TO LOAN AND SECURITY AGREEMENT

All personal property of SERES HEALTH, INC., a Delaware corporation (herein referred to as “Borrower” or “Debtor”) whether presently existing or hereafter created or acquired, and wherever located, including, but not limited to:

- (a) all accounts (including health-care-insurance receivables), chattel paper (including tangible and electronic chattel paper), deposit accounts, documents (including negotiable documents), equipment (including all accessions and additions thereto), financial assets, general intangibles (including payment intangibles and software), goods (including fixtures), instruments (including promissory notes), inventory (including all goods held for sale or lease or to be furnished under a contract of service, and including returns and repossessions), investment property (including securities and securities entitlements), letter of credit rights, money, and all of Debtor’s books and records with respect to any of the foregoing, and the computers and equipment containing said books and records; and
- (b) any and all cash proceeds and/or noncash proceeds of any of the foregoing, including, without limitation, insurance proceeds, and all supporting obligations and the security therefor or for any right to payment.

Notwithstanding the foregoing, the Collateral shall not include (i) property that is nonassignable by its terms without the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406 and 9408 of the Code), (ii) property where the granting of a security interest therein is contrary to applicable law, provided that upon the cessation of any such restriction or prohibition, such property shall automatically become part of the Collateral, (iii) more than sixty five percent (65%) of the voting power of all classes of capital stock of an Excluded Foreign Subsidiary, or (iv) any copyrights, patents, trademarks, servicemarks and applications therefor, now owned or hereafter acquired, or any claims for damages by way of any past, present and future infringement of any of the foregoing (collectively, the “Intellectual Property”); provided, however, that the Collateral shall include all accounts, all general intangibles that consist of rights to payment, and all proceeds from the sale, licensing or disposition of all or any part of, or rights in, any property, including the Intellectual Property (the “Rights to Payment”). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of September , 2013, include the Intellectual Property to the extent necessary to permit perfection of Bank’s security interest in the Rights to Payment.

All terms above have the meanings given to them in the California Uniform Commercial Code, as amended or supplemented from time to time.

**TECHNOLOGY & LIFE SCIENCES DIVISION
LOAN ANALYSIS
LOAN ADVANCE/PAYDOWN REQUEST FORM**

COMPLIANCE CERTIFICATE

Please send all Required Reporting to:

Comerica Bank
 Technology & Life Sciences Division
 Loan Analysis Department
 250 Lytton Avenue, 3rd Floor, Mail Code 4240
 Palo Alto, CA 94301

Phone: (650) 462-6060
 Fax: (650) 462-6061

FROM: SERES HEALTH, INC.

The undersigned authorized Officer of SERES HEALTH, INC. ("Borrower"), hereby certifies that in accordance with the terms and conditions of the Loan and Security Agreement between Borrower and Bank (the "Agreement"), (i) Borrower is in complete compliance for the period ending _____ with all required covenants, including without limitation the ongoing registration of intellectual property rights in accordance with Section 6.8, except as noted below and (ii) except as noted below with respect to the representation and warranty in the last sentence of Section 5.7, all representations and warranties of Borrower stated in the Agreement are true and correct in all material respects on and as of the date hereof as though made at and as of each such date (provided, however, that that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof and those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date). Attached herewith are the required documents supporting the above certification. The Officer further certifies that these are prepared in accordance with Generally Accepted Accounting Principles (GAAP) and are consistently applied from one period to the next except as explained in an accompanying letter or footnotes.

Please indicate compliance status by circling Yes/No under "Complies" or "Applicable" column.

REPORTING COVENANTS	REQUIRED	COMPLIES	
Company Prepared Monthly F/S	Monthly, within 30 days	<input checked="" type="radio"/>	NO
Compliance Certificate	Monthly, within 30 days	<input checked="" type="radio"/>	NO
CPA Audited, Unqualified F/S	Annually, within 180 days of FYE*	<input checked="" type="radio"/>	NO
Annual Business Plan (incl. operating budget)	Annually, within 45 days of FYE	<input checked="" type="radio"/>	NO
Audit	Semi-annual	<input checked="" type="radio"/>	NO
If Public:			
10-Q	Quarterly, within 5 days of SEC filing (50 days)	YES	NO
10-K	Annually, within 5 days of SEC filing (95 days)	YES	NO
Total amount of Borrower's cash and investments	Amount: \$2,689,705.00	<input checked="" type="radio"/>	NO
Total amount of Borrower's cash and investments maintain with Bank	Amount: \$ _____	YES	NO

* commencing with FY ending December 31, 2013.

	DESCRIPTION	APPLICABLE	
Legal Action > \$250,000	Notify promptly upon notice _____	YES	<input checked="" type="radio"/>
Inventory Disputes > \$250,000	Notify promptly upon notice _____	YES	<input checked="" type="radio"/>
Cross default with other agreements > \$250,000	Notify promptly upon notice _____	YES	<input checked="" type="radio"/>
Judgment > \$250,000	Notify promptly upon notice _____	YES	<input checked="" type="radio"/>

**FINANCIAL COVENANTS
TO BE TESTED MONTHLY, UNLESS OTHERWISE NOTED:**

REQUIRED ACTUAL COMPLIES

N/A

OTHER COVENANTS

	<u>REQUIRED</u>	<u>ACTUAL</u>	<u>COMPLIES</u>
Permitted Indebtedness for equipment leases	<\$250,000	0	<input checked="" type="radio"/> YES <input type="radio"/> NO
Permitted Investments for stock repurchase	<\$100,000	0	<input checked="" type="radio"/> YES <input type="radio"/> NO
Permitted Investments for Subsidiaries	<\$500,000	0	<input checked="" type="radio"/> YES <input type="radio"/> NO
Permitted Investments for employee loans	<\$125,000	0	<input checked="" type="radio"/> YES <input type="radio"/> NO
Permitted Investments for joint ventures	<\$350,000	0	<input checked="" type="radio"/> YES <input type="radio"/> NO
Permitted Liens for equipment leases	<\$250,000	0	<input checked="" type="radio"/> YES <input type="radio"/> NO
Permitted Transfers	<\$100,000	0	<input checked="" type="radio"/> YES <input type="radio"/> NO

Please enter below comments regarding violations:

Please enter below exceptions to representation and warranty in last sentence of Section 5.7:

The Officer further acknowledges that at any time Borrower is not in compliance with all the terms set forth in the Agreement, including, without limitation, the financial covenants, no credit extensions will be made.

Very truly yours,

/s/ David Berry

Authorized Signer

Name: David Berry

Title: President

SCHEDULE OF EXCEPTIONS
TO LOAN AND SECURITY AGREEMENT

Permitted Indebtedness (Exhibit A)

Silicon Valley Bank Credit Card in the amount of \$4,000 as of June 30, 2013

Permitted Investments (Exhibit A)

None

Permitted Liens (Exhibit A)

None

Prior Names (Section 5.5)

Newco LS21, Inc.

Inventory or Equipment Locations (Section 5.5)

Northeastern University, Mugar Hall, 360 Huntington Ave., Boston, MA 02115

Litigation (Section 5.6)

None.

Restricted Agreements (Section 5.12)

None.

Deposit and Securities Accounts (Section 6.6)

Checking account number 3300776807 at Silicon Valley Bank

Money Market account 3300891963 at Silicon Valley Bank

Corporation Resolutions and Incumbency Certification
Authority to Procure Loans

I certify that I am the duly elected and qualified Secretary of SERES HEALTH, INC., a Delaware corporation (the "Corporation"); that the Corporation's exact legal name is set forth above; that the Corporation is a corporation duly organized, existing and in good standing under the laws of the State of Delaware; that the following is a true and correct copy of resolutions duly adopted by the Board of Directors of the Corporation in accordance with its bylaws and applicable statutes.

Copy of Resolutions:

Be it Resolved, That:

1. Any one (1) of the following President or CFO (insert titles only) of the Corporation are/is authorized, for, on behalf of, and in the name of the Corporation to:
 - (a) Negotiate and procure loans, letters of credit and other credit or financial accommodations from Comerica Bank ("Bank"), a Texas banking association, from time to time, including without limitation that certain Loan and Security Agreement dated as of September , 2013, as may be subsequently amended, modified, supplemented, extended or restated from time to time.
 - (b) Discount with the Bank, commercial or other business paper belonging to the Corporation made or drawn by or upon third parties, without limit as to amount;
 - (c) Purchase, sell, exchange, assign, endorse for transfer and/or deliver certificates and/or instruments representing stocks, bonds, evidences of Indebtedness or other securities owned by the Corporation, whether or not registered in the name of the Corporation;
 - (d) Give security for any liabilities of the Corporation to the Bank by grant, security interest, assignment, lien, deed of trust or mortgage upon any real or personal property, tangible or intangible of the Corporation;
 - (e) Issue a warrant or warrants to purchase the Corporation's capital stock; and
 - (f) Execute and deliver in form and content as may be required by the Bank any and all notes, evidences of Indebtedness, applications for letters of credit, guaranties, subordination agreements, loan and security agreements, financing statements, assignments, liens, deeds of trust, mortgages, trust receipts and other agreements, instruments or documents to carry out the purposes of these Resolutions, ,and any and all amendments or modifications thereto, any or all of which may relate to all or to substantially all of the Corporation's property and assets.
2. Said Bank be and it is authorized and directed to pay the proceeds of any such loans or discounts as directed by the persons so authorized to sign, whether so payable to the order of any of said persons in their individual capacities or not, and whether such proceeds are deposited to the individual credit of any of said persons or not;
3. Any and all agreements, instruments and documents previously executed and acts and things previously done to carry out the purposes of these Resolutions are ratified, confirmed and approved as the act or acts of the Corporation.
4. These Resolutions shall continue in force, and the Bank may consider the holders of said offices and their signatures to be and continue to be as set forth in a certified copy of these Resolutions delivered to the Bank, until notice to the contrary in writing is duly served on the Bank (such notice to have no effect on any action previously taken by the Bank in reliance on these Resolutions).
5. Any person, corporation or other legal entity dealing with the Bank may rely upon a certificate signed by an officer of the Bank to effect that these Resolutions and any agreement, instrument or document executed pursuant to them are still in full force and effect and binding upon the Corporation.
6. The Bank may consider the holders of the offices of the Corporation and their signatures, respectively, to be and continue to be as set forth in the Certificate of the Secretary of the Corporation until notice to the contrary in writing is duly served on the Bank.

I further certify that the above Resolutions are in full force and effect as of the date of this Certificate; that these Resolutions and any borrowings or financial accommodations under these Resolutions have been properly noted in the corporate books and records, and have not been rescinded, annulled, revoked or modified; that neither the foregoing Resolutions nor any actions to be taken pursuant to them are or will be in contravention of any provision of the certificate of incorporation or bylaws of the Corporation or of any agreement, indenture or other instrument to which the Corporation is a party or by which it is bound; and that neither the certificate of incorporation nor bylaws of the Corporation nor any agreement, indenture or other instrument to which the Corporation is a party or by which it is bound require the vote or consent of shareholders of the Corporation to authorize any act, matter or thing described in the foregoing Resolutions.

I further certify that the following named persons have been duly elected to the offices set opposite their respective names, that they continue to hold these offices at the present time, and that the signatures which appear below are the genuine, original signatures of each respectively:

(PLEASE SUPPLY GENUINE SIGNATURES OF AUTHORIZED SIGNERS BELOW)

NAME (Type or Print)	TITLE	SIGNATURE
<u>David Berry</u>	<u>President</u>	<u>/s/ David Berry</u>
<u>Gregg Beloff</u>	<u>Chief Financial Officer</u>	<u>/s/ Gregg Beloff</u>

I further certify that attached as Exhibit A hereto is a true, correct and complete copy of the Corporation's Certificate of Incorporation (including amendments), as filed with the Delaware Secretary of State. Such Certificate of Incorporation has not been amended, annulled, rescinded, revoked or supplemented, and remains in full force and effect as of the date hereof.

I further certify that attached as Exhibit B hereto is a true, correct and complete copy of Borrower's By-Laws (including amendments). Such By-Laws have not been amended, annulled, rescinded, revoked or supplemented, and remain in full force and effect as of the date hereof.

In Witness Whereof, I have affixed my name as Secretary and have caused the corporate seal (where available) of said Corporation to be affixed on September , 2013.

/s/ David Berry
Name: David Berry
Title: President

The Above Statements are Correct. /s/ Gregg Beloff
Name: Gregg Beloff
Title: Chief Financial Officer

Failure to complete the above when the Secretary is authorized to sign alone shall constitute a certification by the Secretary that the Secretary is the sole Shareholder, Director and Officer of the Corporation.

COMERICA BANK
Member FDIC

ITEMIZATION OF AMOUNT FINANCED
DISBURSEMENT INSTRUCTIONS
(Growth Capital Advances)

Name(s): SERES HEALTH, INC.

Date: September , 2013

\$ credited to deposit account No. _____ when Growth Capital Advances are requested or disbursed to Borrower by cashiers check or wire transfer

Amounts paid to others on your behalf:

\$5,000 to Comerica Bank for Facility Fee

\$ to Bank counsel fees and expenses

\$ to _____

\$ to _____

\$ TOTAL (AMOUNT FINANCED)

Upon consummation of this transaction, this document will also serve as the authorization for Comerica Bank to disburse the loan proceeds as stated above.

/s/ David Berry

Name: David Berry

Title: President



Agreement to Furnish Insurance to Loan and Security Agreement

(Herein called "Bank")

Borrower(s): SERES HEALTH, INC.

I understand that the Loan and Security Agreement or Deed of Trust which I executed in connection with this transaction requires me to provide a physical damage insurance policy including a Lenders Loss Payable Endorsement in favor of the Bank as shown below, within ten (10) days from the date of this agreement.

The following minimum insurance must be provided according to the terms of the security documents.

AUTOMOBILES, TRUCKS, RECREATIONAL VEHICLES
Comprehensive & Collision
Lender's Loss Payable Endorsement

MACHINERY & EQUIPMENT: MISCELLANEOUS PERSONAL PROPERTY
Fire & Extended Coverage
Lender's Loss Payable Endorsement
Breach of Warranty Endorsement

BOATS
All Risk Hull Insurance
Lender's Loss Payable Endorsement
Breach of Warranty Endorsement

AIRCRAFT
All Risk Ground & Flight Insurance
Lender's Loss Payable Endorsement
Breach of Warranty Endorsement

MOBILE HOMES
Fire, Theft & Combined Additional Coverage
Lender's Loss Payable Endorsement
Earthquake

REAL PROPERTY
Fire & Extended Coverage
Lender's Loss Payable Endorsement
All Risk Coverage
Special Form Risk Coverage
Earthquake
Other

INVENTORY

Other Borrower, at its expense, shall keep the Collateral insured against loss or damage by fire, theft, explosion, sprinklers, and all other hazards and risks, and in such amounts, as ordinarily insured against by other owners in similar businesses conducted in the locations where Borrower's business is conducted on the date hereof.

I may obtain the required insurance from any company that is acceptable to the Bank, and will deliver proof of such coverage with an effective date of September , 2013 or earlier.

I understand and agree that if I fail to deliver proof of insurance to the Bank at the address below, or upon the lapse or cancellation of such insurance, the Bank may procure Lender's Single Interest Insurance or other similar coverage on the property. If the Bank procures insurance to protect its interest in the property described in the security documents, the cost for the insurance will be added to my indebtedness as provided in the security documents.

CALIFORNIA CIVIL CODE SECTION 2955.5. HAZARD INSURANCE DISCLOSURE: No lender shall require a borrower, as a condition of receiving or maintaining a loan secured by real property, to provide hazard insurance coverage against risks to the improvements on that real property in an amount exceeding the replacement value of the improvements on the property.

Bank Address for Insurance Documents:
Comerica Bank - Collateral Operations,
Mail Code 6514
1508 W. Mockingbird Lane
Dallas, Texas 75235

I acknowledge having read the provisions of this agreement, and agree to its terms. I authorize the Bank to provide to any person (including any insurance agent or company) any information necessary to obtain the insurance coverage required.

OWNER(S) OF COLLATERAL:

DATED: September , 2013

SERES HEALTH, INC.

/s/ David Berry _____

Name: David Berry

Title: President

INSURANCE VERIFICATION

Date _____

Phone _____

Agents Name _____

Person Talked To _____

Agents Address _____

Insurance Company _____

Policy Number(s) _____

Effective Dates: From _____

To: _____

Deductible \$ _____

Comments: _____



AUTOMATIC LOAN PAYMENT AUTHORIZATION

Date: September, 2013

Obligor Name: SERES HEALTH, INC.
Obligor Number: _____ Lender's Cost Center #: _____
Address: 161 First Street, Cambridge, MA 02142

The undersigned hereby authorizes **Comerica Bank** ("Bank") to charge the account designated below for the payments due on the loan(s) as designated below and all renewals, extensions, modifications and/or substitutions thereof. This authorization will remain in effect unless the undersigned requests a modification that is agreed to by the Bank in writing. The undersigned remains fully responsible for all amounts outstanding to Bank if the designated account is insufficient for repayment.

- Automatic Payment Authorization for all payments on all current and future borrowings, as and when such payments come due (which payments include, without limitation, principal, interest, fees, costs, and expenses).
- Automatic Payment Authorization for all payments on only the specific borrowing identified below, as and when such payments come due (which payments include, without limitation, principal, interest, fees, costs, and expenses).

Specific Obligation Number: _____

- Automatic Payment Authorization for less than all payments on only the specific borrowing identified below, as and when such payments come due.

Specific Obligation Number: _____

- Principal and Interest payments only
- Principal payments only
- Interest payments only
- SPECIAL INSTRUCTIONS/IRREGULAR PAYMENT INSTRUCTIONS

Payment Due Date: Your loan payments will be charged to your account as indicated above on the dates such payments become due (or on a date thereafter when there are available funds) unless that day is a Saturday, Sunday, or Bank holiday in which case such payments will be charged on the following business day, with interest to accrue during this extension as provided under the loan documents.

Account to be Charged:

Account No. _____
Transit No. _____
Number of lead days to issue billing _____
(Charges to account are withdrawals pursuant to account resolution)

BORROWER:

SERES HEALTH, INC.

By: /s/ David Berry
Name: David Berry
Title: President

USA PATRIOT ACT

**NOTICE
OF
CUSTOMER IDENTIFICATION**

IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A NEW ACCOUNT

To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account.

WHAT THIS MEANS FOR YOU: when you open an account, we will ask your name, address, date of birth, and other information that will allow us to identify you. We may also ask to see your driver's license or other identifying documents.

Fax

General Authorization

I hereby authorize Comerica Bank to use my company name, logo, and information relating to our banking relationship in its marketing and advertising campaigns which is intended for Comerica Bank's customers, prospects and shareholders.

Comerica Bank will forward any advertising or article including client for prior review and approval.

/s/ David Berry

Printed name: David Berry

Title: President

SERES HEALTH, INC.

Company

161 First Street

Mailing Address

Cambridge, MA 02142

City, State, Zip Code

617-868-1888

Phone Number

617-868-1115

Fax Number

dberry@FlagshipVentures.com

E-Mail

September , 2013

DEBTOR: SERES HEALTH, INC.

SECURED PARTY: COMERICA BANK

EXHIBIT A to UCC Financing Statement

COLLATERAL DESCRIPTION ATTACHMENT TO UCC NATIONAL FINANCING FORM

All personal property of SERES HEALTH, INC., a Delaware corporation (herein referred to as "Borrower" or "Debtor") whether presently existing or hereafter created or acquired, and wherever located, including, but not limited to:

- (a) all accounts (including health-care-insurance receivables), chattel paper (including tangible and electronic chattel paper), deposit accounts, documents (including negotiable documents), equipment (including all accessions and additions thereto), financial assets, general intangibles (including payment intangibles and software), goods (including fixtures), instruments (including promissory notes), inventory (including all goods held for sale or lease or to be furnished under a contract of service, and including returns and repossessions), investment property (including securities and securities entitlements), letter of credit rights, money, and all of Debtor's books and records with respect to any of the foregoing, and the computers and equipment containing said books and records; and
- (b) any and all cash proceeds and/or noncash proceeds of any of the foregoing, including, without limitation, insurance proceeds, and all supporting obligations and the security therefor or for any right to payment.

Notwithstanding the foregoing, the Collateral shall not include (i) property that is nonassignable by its terms without the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406 and 9408 of the Code), (ii) property where the granting of a security interest therein is contrary to applicable law, provided that upon the cessation of any such restriction or prohibition, such property shall automatically become part of the Collateral, (iii) more than sixty five percent (65%) of the voting power of all classes of capital stock of a controlled foreign corporation (as defined in the Internal Revenue Code of 1986, as amended, and the regulations thereunder) entitled to vote where the pledge of a greater percentage would result in material adverse tax consequences to Borrower, or (iv) Debtor's copyrights, patents, trademarks, servicemarks and applications therefor, now owned or hereafter acquired, or any claims for damages by way of any past, present and future infringement of any of the foregoing (collectively, the "Intellectual Property"); provided, however, that the Collateral shall include all accounts, all general intangibles that consist of rights to payment, and all proceeds from the sale, licensing or disposition of all or any part of, or rights in, any property, including the Intellectual Property (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of September , 2013, include the Intellectual Property to the extent necessary to permit perfection of Secured Party's security interest in the Rights to Payment.

All terms above have the meanings given to them in the California Uniform Commercial Code, as amended or supplemented from time to time.

PRIME REFERENCED RATE ADDENDUM TO
LOAN AND SECURITY AGREEMENT

This Prime Referenced Rate Addendum to Loan and Security Agreement (this "Addendum") is entered into as of September 10, 2013, by and between COMERICA BANK ("Bank") and SERES HEALTH, INC., a Delaware corporation ("Borrower"). This Addendum supplements the terms of the Loan and Security Agreement dated as of the date hereof by and between Borrower and Bank (as the same may be amended, modified, supplemented, extended or restated from time to time, collectively, the "Agreement").

1. Definitions. As used in this Addendum, the following terms shall have the following meanings. Initially capitalized terms used and not defined in this Addendum shall have the meanings ascribed thereto in the Agreement.

a. "Applicable Margin" means three percent (3.00%) per annum.

b. "Business Day" means any day, other than a Saturday, Sunday or any other day designated as a holiday under Federal or applicable State statute or regulation, on which Bank is open for all or substantially all of its domestic and international business (including dealings in foreign exchange) in San Jose, California, and, in respect of notices and determinations relating to the Daily Adjusting LIBOR Rate, also a day on which dealings in dollar deposits are also carried on the London interbank market and on which banks are open for business in London, England.

c. "Change in Law" means the occurrence, after the date hereof, of any of the following: (i) the adoption or introduction of, or any change in any applicable law, treaty, rule or regulation (whether domestic or foreign) now or hereafter in effect and whether or not applicable to Bank on such date, or (ii) any change in interpretation, administration or implementation thereof of any such law, treaty, rule or regulation by any Governmental Authority, or (iii) the issuance, making or implementation by any Governmental Authority of any interpretation, administration, request, regulation, guideline, or directive (whether or not having the force of law), including any risk-based capital guidelines. For purposes of this definition, (x) a change in law, treaty, rule, regulation, interpretation, administration or implementation shall include, without limitation, any change made or which becomes effective on the basis of a law, treaty, rule, regulation, interpretation, administration or implementation then in force, the effective date of which change is delayed by the terms of such law, treaty, rule, regulation, interpretation, administration or implementation, and (y) the Dodd-Frank Wall Street Reform and Consumer Protection Act (Pub. L. 111-203, H.R. 4173) and all requests, rules, regulations, guidelines, interpretations or directives promulgated thereunder or issued in connection therewith shall be deemed to be a "Change in Law", regardless of the date enacted, adopted, issued or promulgated, whether before or after the date hereof, and (z) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States regulatory authorities, in each case pursuant to Basel III, shall each be deemed to be a "Change in Law", regardless of the date enacted, adopted, issued or implemented.

d. "Daily Adjusting LIBOR Rate" means, for any day, a per annum interest rate which is equal to the quotient of the following:

- (1) for any day, the per annum rate of interest determined on the basis of the rate for deposits in United States Dollars for a period equal to one (1) month appearing on Page BBAM of the Bloomberg Financial Markets Information Service as of 8:00 a.m. (California time) (or as soon thereafter as practical) on such day, or if such day is not a Business Day, on the immediately preceding Business Day. In the event that such rate does not appear on Page BBAM of the Bloomberg Financial Markets Information Service (or otherwise on such Service) on any day, the "Daily Adjusting LIBOR Rate" for such day shall be determined by reference to such other publicly available service for displaying eurodollar rates as may be reasonably selected by Bank, or in the absence of such other service, the "Daily Adjusting LIBOR Rate" for such day shall, instead, be determined based upon the average of the rates at which Bank is offered dollar deposits at or about 8:00 a.m. (California time) (or as soon thereafter as practical), on such day, or if such day is not a Business Day, on the immediately preceding Business Day, in the interbank eurodollar market in an amount comparable to the outstanding principal amount of the Obligations and for a period equal to one (1) month;

divided by

- (2) 1.00 minus the maximum rate (expressed as a decimal) on such day at which Bank is required to maintain reserves on “Euro-currency Liabilities” as defined in and pursuant to Regulation D of the Board of Governors of the Federal Reserve System or, if such regulation or definition is modified, and as long as Bank is required to maintain reserves against a category of liabilities which includes eurodollar deposits or includes a category of assets which includes eurodollar loans, the rate at which such reserves are required to be maintained on such category.

e. “Governmental Authority” means the government of the United States of America or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including, without limitation, any supranational bodies such as the European Union or the European Central Bank).

f. “LIBOR Lending Office” means Bank’s office located in the Cayman Islands, British West Indies, or such other branch of Bank, domestic or foreign, as it may hereafter designate as its LIBOR Lending Office by notice to Borrower.

g. “Prime Rate” means the per annum interest rate established by Bank as its prime rate for its borrowers, as such rate may vary from time to time, which rate is not necessarily the lowest rate on loans made by Bank at any such time.

h. “Prime Referenced Rate” means, for any day, a per annum interest rate which is equal to the Prime Rate in effect on such day, but in no event and at no time shall the Prime Referenced Rate be less than the sum of the Daily Adjusting LIBOR Rate for such day plus two and one-half percent (2.50%) per annum. If, at any time, Bank determines that it is unable to determine or ascertain the Daily Adjusting LIBOR Rate for any day, the Prime Referenced Rate for each such day shall be the Prime Rate in effect at such time, but not less than two and one-half percent (2.50%) per annum.

2. Interest Rate. Subject to the terms and conditions of this Addendum, the Obligations under the Agreement shall bear interest at the Prime Referenced Rate plus the Applicable Margin.

3. Payment of Interest. Accrued and unpaid interest on the unpaid balance of the Obligations outstanding under the Agreement shall be payable monthly, in arrears, on the first day of each month, until maturity (whether as stated herein, by acceleration, or otherwise). In the event that any payment under this Addendum becomes due and payable on any day which is not a Business Day, the due date thereof shall be extended to the next succeeding Business Day, and, to the extent applicable, interest shall continue to accrue and be payable thereon during such extension at the rates set forth in this Addendum. Interest accruing hereunder shall be computed on the basis of a year of 360 days, and shall be assessed for the actual number of days elapsed, and in such computation, effect shall be given to any change in the applicable interest rate as a result of any change in the Prime Referenced Rate on the date of each such change.

4. Bank’s Records. The amount and date of each advance under the Agreement, its applicable interest rate, and the amount and date of any repayment shall be noted on Bank’s records, which records shall be conclusive evidence thereof, absent manifest error; provided, however, any failure by Bank to make any such notation, or any error in any such notation, shall not relieve Borrower of its obligations to repay Bank all amounts payable by Borrower to Bank under or pursuant to this Addendum and the Agreement, when due in accordance with the terms hereof.

5. Default Interest Rate. From and after the occurrence of any Event of Default, and for so long as any such Event of Default remains unremedied or uncured thereafter, the Obligations outstanding under the Agreement shall bear interest at a per annum rate of five percent (5%) above the otherwise applicable interest rate hereunder, which interest shall be payable upon demand. In addition to the foregoing, a late payment charge equal to five percent (5%) of each late payment hereunder may be charged on any payment not received by Bank within ten (10) calendar days after the payment due date therefor, but acceptance of payment of any such charge shall not constitute a waiver of any Event of Default under the Agreement. In no event shall the interest payable under this Addendum and the Agreement at any time exceed the maximum rate permitted by law.

6. Prepayment. Borrower may prepay all or part of the outstanding balance of any Obligations at any time without premium or penalty. Any prepayment hereunder shall also be accompanied by the payment of all accrued and unpaid interest on the amount so prepaid. Borrower hereby acknowledges and agrees that the foregoing shall not, in any way whatsoever, limit, restrict, or otherwise affect Bank's right to make demand for payment of all or any part of the Obligations under the Agreement due on a demand basis in Bank's sole and absolute discretion.

7. Regulatory Developments or Other Circumstances Relating to the Daily Adjusting LIBOR Rate.

a. If any Change in Law shall: (a) subject Bank to any tax, duty or other charge with respect to this Addendum or any Obligations under the Agreement, or shall change the basis of taxation of payments to Bank of the principal of or interest under this Addendum or any other amounts due under this Addendum in respect thereof (except for changes in the rate of tax on the overall net income of Bank or its LIBOR Lending Office imposed by the jurisdiction in which Bank's principal executive office or LIBOR Lending Office is located); or (b) impose, modify or deem applicable any reserve (including, without limitation, any imposed by the Board of Governors of the Federal Reserve System), special deposit or similar requirement against assets of, deposits with or for the account of, or credit extended by Bank, or shall impose on Bank or the foreign exchange and interbank markets any other condition affecting this Addendum or the Obligations; and the result of any of the foregoing is to increase the cost to Bank of maintaining any part of the Obligations or to reduce the amount of any sum received or receivable by Bank under this Addendum by an amount deemed by Bank to be material, then Borrower shall pay to Bank, within fifteen (15) days of Borrower's receipt of written notice from Bank demanding such compensation, such additional amount or amounts as will compensate Bank for such increased cost or reduction. A certificate of Bank, prepared in good faith and in reasonable detail by Bank and submitted by Bank to Borrower, setting forth the basis for determining such additional amount or amounts necessary to compensate Bank shall be conclusive and binding for all purposes, absent manifest error.

b. In the event that any Change in Law affects or would affect the amount of capital required or expected to be maintained by Bank (or any corporation controlling Bank), and Bank determines that the amount of such capital is increased by or based upon the existence of any obligations of Bank hereunder or the maintaining of any Obligations, and such increase has the effect of reducing the rate of return on Bank's (or such controlling corporation's) capital as a consequence of such obligations or the maintaining of such Obligations to a level below that which Bank (or such controlling corporation) could have achieved but for such circumstances (taking into consideration its policies with respect to capital adequacy), then Borrower shall pay to Bank, within fifteen (15) days of Borrower's receipt of written notice from Bank demanding such compensation, additional amounts as are sufficient to compensate Bank (or such controlling corporation) for any increase in the amount of capital and reduced rate of return which Bank reasonably determines to be allocable to the existence of any obligations of Bank hereunder or to maintaining any Obligations. A certificate of Bank as to the amount of such compensation, prepared in good faith and in reasonable detail by Bank and submitted by Bank to Borrower, shall be conclusive and binding for all purposes absent manifest error.

8. Legal Effect. Except as specifically modified hereby, all of the terms and conditions of the Agreement remain in full force and effect.

9. Conflicts. As to the matters specifically the subject of this Addendum, in the event of any conflict between this Addendum and the Agreement, the terms of this Addendum shall control.

(remainder of page left blank)

IN WITNESS WHEREOF, the parties have agreed to the foregoing as of the date first set forth above.

COMERICA BANK

SERES HEALTH, INC.

By: /s/ Jason Pan
Name: Jason Pan
Title: Vice President

By: /s/ David Berry
Name: David Berry
Title: President

FIRST AMENDMENT
TO LOAN AND SECURITY AGREEMENT

This First Amendment to Loan and Security Agreement (this "Amendment") is entered into as of December 22, 2014, by and between COMERICA BANK ("Bank") and SERES HEALTH, INC., a Delaware corporation ("Borrower").

RECITALS

A. Borrower and Bank are parties to that certain Loan and Security Agreement dated as of September 9, 2013, as amended, modified, supplemented, extended or restated from time to time (collectively, the "Agreement").

B. Borrower has requested that Bank amend certain provisions of the Agreement, and, while Bank is under no obligation to do so, Bank is willing to amend the Agreement in accordance with and subject to the terms and conditions of this Amendment.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the parties agree as follows:

1. Amendments to the Agreement.

1.1 Section 5.10 of the Agreement is hereby amended and restated in its entirety to read as follows:

5.10 Subsidiaries. Borrower does not own any stock, partnership interest or other equity securities of any Person, except for Permitted Investments. As of the First Amendment Closing Date, Borrower has no Subsidiaries other than Seres Securities. Seres Securities is an MSC Subsidiary and qualifies as an Excluded MSC Subsidiary.

1.2 Section 6.6 of the Agreement is hereby amended and restated in its entirety to read as follows:

6.6 Accounts. Borrower shall, and shall cause all of its Subsidiaries (other than MSC Subsidiaries) to maintain all its and their depository, operating, cash management accounts with Bank and all of its and their primary investment and securities accounts with Bank. Seres Securities may maintain assets in deposit or securities accounts outside of Bank; provided however, no transfers or withdrawals from such accounts shall be permitted except to a deposit account of Borrower maintained with Bank.

1.3 Section 6.10 of the Agreement is hereby amended and restated in its entirety to read as follows:

6.10 Creation/Acquisition of Subsidiaries. Without limiting the generality of any other provision hereof, in the event Borrower or any Subsidiary creates or acquires any Subsidiary, Borrower and such Subsidiary shall (a) promptly notify Bank in writing of the creation or acquisition of such new Subsidiary, (b) take all such action as may be reasonably required by Bank to cause each such Subsidiary (other than an Excluded Subsidiary) to guarantee the Obligations of Borrower under the Loan Documents and, in each case, grant a continuing pledge and security interest in and to the property and assets of such Subsidiary (substantially as described on Exhibit B hereto), and (c) Borrower (or any intermediate Subsidiary holding the Equity Interests in such Subsidiary) shall grant and pledge to Bank a perfected security interest in the Equity Interests of such Subsidiary (unless it is an Excluded MSC Subsidiary and such grant or pledge would result in material adverse tax consequences to Bank); provided that Bank shall not have a security interest in more than sixty five percent (65%) of the voting Equity Interests of any Excluded Foreign Subsidiary.

1.4 The Agreement is hereby amended by adding a new Section 7.12 to read as follows:

7.12 MSC Subsidiaries. Cause or permit (i) any MSC Subsidiary to incur or be liable for any Indebtedness other than expenses incurred in the ordinary course of its business that are incidental to the maintenance of its existence and ownership of its assets, (ii) any Lien to exist with respect to any assets of any MSC Subsidiary, and (iii) any MSC Subsidiary to transfer or withdraw funds, securities or other assets from its deposit, investment or securities accounts other than transfers to deposit accounts of Borrower maintained with Bank. Borrower shall provide to Bank prompt written notice of each transfer of funds to any MSC Subsidiary.

1.5 Exhibit A to the Agreement is hereby amended by adding or amending and restating the following defined terms to read as follows:

“Excluded MSC Subsidiary” means an MSC Subsidiary as to which all of the following apply (i) it is qualified as a Massachusetts securities corporation, (ii) the guaranteeing of the Obligations by such MSC Subsidiary and the granting of a Lien on any of its assets to secure the Obligations, would result in material adverse tax consequences to Borrower, (iii) all of its assets are maintained in deposit accounts maintained that have been disclosed in writing to Bank, (iv) such MSC Subsidiary has no operations or business activities other than the maintenance, investment and management of funds transferred from Borrower from the proceeds of the sale and issuance of Borrower’s Equity Interests and Subordinated Debt, (v) its Equity Interests are pledged to Bank as security for the Obligations and all original share certificates have been promptly delivered to Bank as Collateral together with undated stock powers duly executed in blank (unless the pledge of such Equity Interests would result in material adverse tax consequences to Borrower), (vi) such MSC Subsidiary has no outstanding Indebtedness other than expenses incurred in the ordinary course of its business that are incidental to the maintenance of its existence and ownership of its assets, and (vii) no Liens exist with respect to any of its assets or properties.

“Excluded Subsidiary” means (a) each Excluded Foreign Subsidiary, and (b) each Excluded MSC Subsidiary.

“First Amendment Closing Date” means December , 2014.

“MSC Subsidiary” means a Subsidiary of Borrower that is a corporation that qualifies as a Massachusetts securities corporation by meeting the requirements of Chapter 63, Section 38B of the Massachusetts General Laws.

“Seres Securities” means Seres Therapeutics Securities Corporation, a Massachusetts corporation.

1.6 Exhibit A to the Agreement is further amended by amending and restating paragraph (e) of the definition of “Permitted Investments” in its entirety to read as follows:

(e) (i) Investments of wholly-owned Subsidiaries of Borrower in or to other wholly-owned Subsidiaries of Borrower or Borrower; (ii) Investments by Borrower in its wholly-owned Subsidiaries (other than MSC Subsidiaries) not to exceed Five Hundred Thousand Dollars (\$500,000) in the aggregate in any fiscal year; (iii) Investments by Borrower in MSC Subsidiaries to the extent of the cash proceeds of the sale and issuance of Borrower’s Equity Interests and Subordinated Debt, so long as no Event of Default has occurred and is continuing at the time of such Investment; and (iv) Investments by Borrower in an MSC Subsidiary (which, at the time of the Investment, has no assets) in amounts and to the extent reasonably necessary to cover such MSC Subsidiary’s taxes, bank fees and other ordinary course of business operating expenses, if any, so long as no Event of Default has occurred and is continuing at the time of such transfer;

1.7 Exhibit B to the Agreement is hereby amended in its entirety and replaced with Exhibit B attached hereto.

2. Consent. Bank hereby consents to the formation by Borrower of Series Securities as a wholly-owned MSC Subsidiary. Bank's consent: (a) in no way shall be deemed to be a waiver by Bank of, or an agreement by Bank to waive, any covenant, liability or obligation of Borrower or any other Person or to waive any right, power, or remedy of Bank, except as expressly set forth herein; (b) shall not limit or impair Bank's right to demand strict performance of Borrower's liabilities and obligations to Bank and the Obligations under the Agreement and the other Loan Documents at all times following the date hereof; (c) in no way shall obligate Bank to make any future waivers, consents or modifications to the Agreement or any other Loan Document; and (d) is not a continuing waiver with respect to any failure to perform any Obligation. Borrower acknowledges and agrees that Bank is relying upon Borrower's representations, warranties and agreements, as set forth herein and in the Loan Documents in granting the foregoing waiver and consent.

3. No Waivers. No course of dealing on the part of Bank or its officers, nor any failure or delay in the exercise of any right by Bank, shall operate as a waiver thereof, and any single or partial exercise of any such right shall not preclude any later exercise of any such right. Bank's failure at any time to require strict performance by Borrower of any provision shall not affect any right of Bank thereafter to demand strict compliance and performance. Any suspension or waiver of a right must be in writing signed by an officer of Bank.

4. Miscellaneous. Unless otherwise defined, all initially capitalized terms in this Amendment shall be as defined in the Agreement. The Agreement, as amended hereby, shall be and remain in full force and effect in accordance with its terms and hereby is ratified and confirmed in all respects. Except as expressly set forth herein, the execution, delivery, and performance of this Amendment shall not operate as a waiver of, or as an amendment of, any right, power, or remedy of Bank under the Agreement, as in effect prior to the date hereof. Borrower ratifies and reaffirms the continuing effectiveness of all promissory notes, guaranties, security agreements, mortgages, deeds of trust, environmental agreements, and all other instruments, documents and agreements entered into in connection with the Agreement. Borrower hereby further affirms its absolute and unconditional promise to pay to Bank the Growth Capital Advances, other Credit Extensions all other amounts due under the Letters of Credit and the other Loan Documents (including, without limitation, the Obligations), at the times and in the amounts provided for therein. Borrower confirms and agrees that the obligations of Borrower to Bank under the Agreement as supplemented hereby are secured by and entitled to the benefits of the Loan Documents. The parties agree that this Amendment shall be deemed to be one of the Loan Documents under the Agreement. Nothing in this Amendment shall constitute a satisfaction of any of Borrower's Obligations.

5. Representations and Warranties. In order to induce Bank to enter into this Amendment, Borrower hereby represents and warrants to Bank as follows:

5.1 The representations and warranties contained in the Agreement and the other Loan Documents were true and correct in all material respects when made and continue to be true and correct in all material respects as of the date of this Amendment (provided, however, that those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date).

5.2 Both before and immediately after giving effect to this Amendment and the other transactions contemplated hereby, no Event of Default, or other event or circumstance that with the giving of notice or the passage of time could become an Event of Default, has occurred and is continuing.

5.3 The execution, delivery, and performance by Borrower of this Amendment and the other documents, instruments and agreements delivered or to be delivered to Bank in connection herewith (i) are within the corporate powers of Borrower and have been duly authorized by all necessary corporate action on the part of Borrower, (ii) do not require any governmental or third party consents, except those which have been duly obtained and are in full force and effect, (iii) do not and will not conflict with any requirement of law, Borrower's articles or certificate of incorporation, bylaws, partnership agreement, operating agreement, minutes or resolutions, (iv) after giving effect to this Amendment, do not result in any breach of or constitute a default under any agreement or instrument to which Borrower or any of its Subsidiaries is a party or by which Borrower or any of its Subsidiaries or their respective properties are bound, and (v) do not result in or require the creation or imposition of any mortgage, deed of trust, pledge, lien, security interest or other charge or encumbrance of any nature upon any of the assets or properties of Borrower, other than those in favor of Bank.

5.4 This Amendment and the other instruments and agreements delivered or to be delivered to Bank in connection herewith have been duly executed and delivered by Borrower and constitute the legal, valid, and binding obligation of Borrower, enforceable against Borrower in accordance with their respective terms, except to the extent that (i) enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws of general application affecting the rights and remedies of creditors, (ii) enforcement may be subject to general principles of equity, and (iii) the availability of the remedies of specific performance and injunctive relief may be subject to the discretion of the court before which any proceedings for such remedies may be brought.

5.5 Borrower has no right of offset, defense, counterclaim, dispute or disagreement of any kind or nature whatsoever with respect to any of its liabilities, obligations or indebtedness arising under or in connection with any Loan Document.

6. Conditions Precedent. As a condition to the effectiveness of this Amendment, Bank shall have received, in form and substance satisfactory to Bank, the following:

6.1 this Amendment, duly executed by Borrower;

6.2 a certificate of the Secretary of Borrower with respect to resolutions and incumbency;

6.3 all Bank Expenses incurred through the date of this Amendment, which may be debited from any of Borrower's accounts; and

6.4 such other documents, instruments and certificates and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

7. Counterparts. This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument.

[Remainder of Page Left Blank]

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the first date above written.

SERES HEALTH, INC.

By: /s/ Eric Shaff

Title: CFO

COMERICA BANK

By: /s/ Jason Pan

Title: Vice President

DEBTOR: SERES HEALTH, INC.

SECURED PARTY: COMERICA BANK

EXHIBIT B

COLLATERAL DESCRIPTION ATTACHMENT TO LOAN AND SECURITY AGREEMENT

All personal property of SERES HEALTH, INC., a Delaware corporation (herein referred to as "Borrower" or "Debtor") whether presently existing or hereafter created or acquired, and wherever located, including, but not limited to:

- (a) all accounts (including health-care-insurance receivables), chattel paper (including tangible and electronic chattel paper), deposit accounts, documents (including negotiable documents), equipment (including all accessions and additions thereto), financial assets, general intangibles (including payment intangibles and software), goods (including fixtures), instruments (including promissory notes), inventory (including all goods held for sale or lease or to be furnished under a contract of service, and including returns and repossessions), investment property (including securities and securities entitlements), letter of credit rights, money, and all of Debtor's books and records with respect to any of the foregoing, and the computers and equipment containing said books and records; and
- (b) any and all cash proceeds and/or noncash proceeds of any of the foregoing, including, without limitation, insurance proceeds, and all supporting obligations and the security therefor or for any right to payment.

Notwithstanding the foregoing, the Collateral shall not include (i) property that is nonassignable by its terms without the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406 and 9408 of the Code), (ii) property where the granting of a security interest therein is contrary to applicable law, provided that upon the cessation of any such restriction or prohibition, such property shall automatically become part of the Collateral, (iii) more than sixty five percent (65%) of the voting power of all classes of capital stock of an Excluded Foreign Subsidiary, (iv) the capital stock issued by any MSC Subsidiary to the extent the pledge of such shares to Bank would result in material adverse tax consequences to Borrower, or (v) any copyrights, patents, trademarks, servicemarks and applications therefor, now owned or hereafter acquired, or any claims for damages by way of any past, present and future infringement of any of the foregoing (collectively, the "Intellectual Property"); provided, however, that the Collateral shall include all accounts, all general intangibles that consist of rights to payment, and all proceeds from the sale, licensing or disposition of all or any part of, or rights in, any property, including the Intellectual Property (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of September 9, 2013, include the Intellectual Property to the extent necessary to permit perfection of Bank's security interest in the Rights to Payment.

All terms above have the meanings given to them in the California Uniform Commercial Code, as amended or supplemented from time to time.

LEASE AGREEMENT

THIS LEASE AGREEMENT (this “**Lease**”) is made this 29th day of June, 2012, between **AREMA REGION NO. 21, LLC**, a Delaware limited liability company (“**Landlord**”), and **SERES HEALTH, INC.**, a Delaware corporation (“**Tenant**”).

Building: 161 First Street, Cambridge, Massachusetts

Premises: That portion of the first floor of the Building containing approximately 3,926 rentable square feet, as determined by Landlord, as shown on **Exhibit A**.

Project: The real property on which the Building is located, together with all improvements thereon and appurtenances thereto as described on **Exhibit B**.

Base Rent: Months 1 – 12: \$41.00 per rentable square foot of the Premises per year
Months 12 – 24: \$43.00 per rentable square foot of the Premises per year

Rentable Area of Premises: 3,926 sq. ft.

Security Deposit: \$26,827.67

Rentable Area of Project: 46,356 sq. ft.

Tenant’s Share of Operating Expenses: 8.47%

Target Commencement Date: 1 business day after the mutual execution and delivery of this Lease.

Base Term: Beginning on the Commencement Date and ending 24 months from the first day of the first full month of the Term (as defined in Section 2) hereof.

Permitted Use: Research and development laboratory, related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 7 hereof.

Address for Rent Payment:

P.O. Box 975383
Dallas, TX 75397-5383

Landlord’s Notice Address:

385 E. Colorado Boulevard, Suite 299
Pasadena, CA 91101
Attention: Corporate Secretary

Tenant’s Notice Address:

161 First Street, Suite 1A
Cambridge, MA 02142
Attention: Chief Executive Officer

The following Exhibits and Addenda are attached hereto and incorporated herein by this reference:

EXHIBIT A - PREMISES DESCRIPTION
 EXHIBIT C - INTENTIONALLY OMITTED
 EXHIBIT E - RULES AND REGULATIONS
 EXHIBIT G - ASBESTOS DISCLOSURE

EXHIBIT B - DESCRIPTION OF PROJECT
 EXHIBIT D - COMMENCEMENT DATE
 EXHIBIT F - TENANT’S PERSONAL PROPERTY

1. **Lease of Premises.** Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project that are for the non-exclusive use of tenants of the Project are collectively referred to herein as the “**Common Areas**.” Landlord reserves the right to modify Common Areas, provided that such modifications do not materially adversely affect Tenant’s use of the Premises for the Permitted Use. From and after the Commencement Date through the expiration of the Term, Tenant shall

have access to the Building and the Premises 24 hours a day, 7 days a week, except in the case of emergencies, as the result of Legal Requirements, the performance by Landlord of any installation, maintenance or repairs, or any other temporary interruptions, and otherwise subject to the terms of this Lease.

2. Delivery; Acceptance of Premises; Commencement Date. Landlord shall use reasonable efforts to deliver the Premises to Tenant on or before the Target Commencement Date (“**Delivery**” or “**Deliver**”). If Landlord fails to timely Deliver the Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein. If Landlord does not Deliver the Premises within 60 days of the Target Commencement Date for any reason other than Force Majeure delays, this Lease may be terminated by Tenant by written notice to Landlord, and if so terminated by either: (a) the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease. If Tenant does not elect to void this Lease within 5 business days of the lapse of such 60 day period, such right to void this Lease shall be waived and this Lease shall remain in full force and effect.

The “**Commencement Date**” shall be the date Landlord Delivers the Premises to Tenant. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date, and the expiration date of the Term when such are established in the form of the “Acknowledgement of Commencement Date” attached to this Lease as **Exhibit D**; provided, however, Tenant’s failure to execute and deliver such acknowledgment shall not affect Landlord’s rights hereunder. The “**Term**” of this Lease shall be the Base Term, as defined above on the first page of this Lease, and the Extension Term which Tenant may elect pursuant to Section 39 hereof.

Except as otherwise set forth in this Lease: (i) Tenant shall accept the Premises in their condition as of the Commencement Date, subject to all applicable Legal Requirements (as defined in Section 7 hereof); (ii) Landlord shall have no obligation for any defects in the Premises; and (iii) Tenant’s taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken.

For the period of 30 consecutive days after the Commencement Date, Landlord shall, at its sole cost and expense (which shall not constitute an Operating Expense), be responsible for any repairs that are required to be made to the Building or Building Systems (as defined in Section 13), unless Tenant or any Tenant Party was responsible for the cause of such repair, in which case Tenant shall pay the cost.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant’s business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant’s representations, warranties, acknowledgments and agreements contained herein.

3. Rent.

(a) **Base Rent.** The first month’s Base Rent and the Security Deposit shall be due and payable on delivery of an executed copy of this Lease to Landlord. Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, equal monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office of Landlord for payment of Rent set forth above, or to such other person or at such other place as Landlord may from time to time designate in writing. Payments of Base Rent for any fractional calendar month shall be prorated. The obligation of Tenant to pay Base Rent and other sums

to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 5) due hereunder except for any abatement as may be expressly provided in this Lease.

(b) **Additional Rent.** In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent (“**Additional Rent**”): (i) Tenant’s Share of “Operating Expenses” (as defined in Section 5), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period.

4. **Base Rent Adjustments.** Base Rent shall be increased during the Base Term as provided for in the schedule set forth on page 1 of this Lease. Base Rent adjustments for any fractional calendar month shall be prorated.

5. **Operating Expense Payments.** Landlord shall deliver to Tenant a written estimate of Operating Expenses for each calendar year during the Term (the “**Annual Estimate**”), which may be revised by Landlord from time to time during such calendar year. During each month of the Term, on the same date that Base Rent is due, Tenant shall pay Landlord an amount equal to 1/12th of Tenant’s Share of the Annual Estimate. Payments for any fractional calendar month shall be prorated.

The term “**Operating Expenses**” means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, Taxes (as defined in Section 9), capital repairs and improvements amortized over the lesser of 7 years and the useful life of such capital items, and the costs of Landlord’s third party property manager or, if there is no third party property manager, administration rent, in either case not to exceed 3% of Base Rent), excluding only:

(a) the original construction costs of the Project and renovation prior to the date of the Lease and costs of correcting defects in such original construction or renovation;

(b) capital expenditures for expansion of the Project;

(c) interest, principal payments of Mortgage (as defined in Section 27) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured;

(d) depreciation of the Project (except for capital improvements, the cost of which are includable in Operating Expenses);

(e) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;

(f) legal and other expenses incurred in the negotiation or enforcement of leases;

(g) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;

(h) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;

(i) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;

(j) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;

(k) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;

(l) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 7);

(m) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;

(n) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;

(o) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project;

(p) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;

(q) costs incurred in the sale or refinancing of the Project;

(r) net income taxes of Landlord or the owner of any interest in the Project, franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein;

(s) any costs incurred to remove, study, test or remediate Hazardous Materials in or about the Building or the Project (provided, however, that the foregoing is in no event intended to limit Tenant's obligations under Section 28 or Section 30 of this Lease); and

(t) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the total and Tenant's Share of actual Operating Expenses for the previous calendar year, and (b) the total of Tenant's payments in respect of Operating Expenses for such year. If Tenant's Share of actual Operating Expenses for such year exceeds Tenant's payments of Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses for such year exceed Tenant's Share of actual Operating Expenses for such year Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 90 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 90 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Excess Operating Expenses, Landlord will provide Tenant with access to Landlord's books and records in connection with the operation of the Project and such information in connection with the operation of the Project as Landlord reasonably determines to be responsive to Tenant's questions (the "**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Excess Operating Expenses, then Tenant shall have the right to have an independent regionally recognized accounting firm, working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense) and approved by Landlord (which approval shall not be unreasonably withheld or delayed), audit and/or review the Expense Information for the year in question (the "**Independent Review**"). The results of any such Independent Review shall be binding on Landlord and Tenant, if the Independent Review shows that Tenant's actual payments with respect to the Excess Operating Expenses for the calendar year in question exceeded Tenant's Share of Excess Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Excess Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration, or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Excess Operating Expenses for such calendar year were less than Tenant's Share of Excess Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid Tenant's Share of Excess Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review. Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Project is not at least 95% occupied on average during any year of the Term, Tenant's Share of Operating Expenses for such year shall be computed as though the Project had been 95% occupied on average during such year.

"**Tenant's Share**" shall be the percentage set forth on the first page of this Lease as Tenant's Share as reasonably adjusted by Landlord for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. Base Rent, Tenant's Share of Operating Expenses and all other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "**Rent**."

6. **Security Deposit.** Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit (the "**Security Deposit**") for the performance of all of Tenant's obligations hereunder in the amount set forth on page 1 of this Lease, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the "**Letter of Credit**"): (i) in form and substance satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft (which may be presented by delivery by overnight courier) at the financial institution's offices in the United States. If Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease, The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Upon each occurrence of a Default (as defined in [Section 20](#)), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, future rent damages and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or

provided by law. Landlord's right to use the Security Deposit under this Section 6 includes the right to use the Security Deposit to pay future rent damages following the termination of this Lease pursuant to Section 21(c) below. Upon any use of all or any portion of the Security Deposit, Tenant shall pay Landlord on demand the amount that will restore the Security Deposit to the amount set forth on Page 1 of this Lease. Tenant hereby waives the provisions of any law, now or hereafter in force, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods prior to the filing of such proceedings. Upon any such use of all or any portion of the Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 90 days after the expiration or earlier termination of this Lease.

If Landlord transfers its interest in the Project or this Lease, Landlord shall either (a) transfer any Security Deposit then held by Landlord to a person or entity assuming Landlord's obligations under this Section 6, or (b) return to Tenant any Security Deposit then held by Landlord and remaining after the deductions permitted herein. Upon such transfer to such transferee or the return of the Security Deposit to Tenant, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon.

Notwithstanding anything to the contrary contained herein, the parties hereto agree that Tenant may deposit the sum of \$26,827.67 in cash with Landlord as the Security Deposit under this Lease concurrent with Tenant's delivery to Landlord of an original of this Lease executed by Tenant; provided, however, that Tenant shall replace the cash Security Deposit with a Letter of Credit within 30 days thereafter. Promptly after the delivery to Landlord of the approved and effective Letter of Credit in the amount of \$26,827.67, Landlord shall return the cash Security Deposit to Tenant.

7. Use. The Premises shall be used solely for the Permitted Use set forth in the basic lease provisions on page 1 of this Lease, and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "ADA") (collectively, "**Legal Requirements**" and each, a "**Legal Requirement**"). Tenant shall, upon 5 days' written notice from Landlord, discontinue any use of the Premises which is declared by any Governmental Authority (as defined in Section 9) having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant's or Landlord's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar legal requirement. Tenant shall reimburse Landlord promptly upon demand for any additional premium charged for any such insurance policy by reason of Tenant's failure to comply with the provisions of this Section or otherwise caused by Tenant's use and/or occupancy of the Premises. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises

so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment weighing 500 pounds or more in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord. Tenant shall not, without the prior written consent of Landlord, use the Premises in any manner which will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use.

Landlord has disclosed to Tenant that the Project is the subject of an Activity and Use Limitation, which is incorporated herein by reference, and Tenant acknowledges receipt of a copy of such Activity and Use Limitation prior to execution of this Lease.

Landlord shall be responsible for the compliance of the Common Areas of the Project with the Legal Requirements as of the Commencement Date. Following the Commencement Date, Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located) and at Tenant's expense (to the extent such Legal Requirement is triggered by reason of Tenant's, as compared to other tenants of the Project, specific use of the Premises or Tenant's alterations) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements. Tenant, at its sole expense, shall make any alterations or modifications to the interior of the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA) related to Tenant's use or occupancy of the Premises. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "**Claims**") arising out of or in connection with Legal Requirements related to Tenant's use or occupancy of the Premises, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all such Claims.

8. Holding Over. If, with Landlord's express written consent, Tenant retains possession of the Premises after the termination of the Term, (i) unless otherwise agreed in such written consent, such possession shall be subject to immediate termination by Landlord at any time, (ii) all of the other terms and provisions of this Lease (including, without limitation, the adjustment of Base Rent pursuant to Section 4 hereof) shall remain in full force and effect (excluding any expansion or renewal option or other similar right or option) during such holdover period, (iii) Tenant shall continue to pay Base Rent in the amount payable upon the date of the expiration or earlier termination of this Lease or such other amount as Landlord may indicate, in Landlord's sole and absolute discretion, in such written consent, and (iv) all other payments shall continue under the terms of this Lease. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to 150% of Rent in effect during the last 30 days of the Term, and (B) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over, including consequential damages. No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section 8 shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.

9. Taxes. Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or

(ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (v) imposed as a license or other fee, charge, tax, or assessment on Landlord's business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. If Landlord shall receive any abatement or refund of Taxes and such abatement or refund is for a time period for which Tenant has made payments during the Term, then out of any balance remaining after deducting Landlord's expenses incurred in obtaining such refund or abatement, Landlord shall, at Landlord's option, either (i) credit the excess amount determined by Landlord to be attributable to the Premises to the next succeeding installments of estimated Taxes or (ii) pay the excess amount determined by Landlord to be attributable to the Premises to Tenant within 30 days after delivery of the Annual Statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay such excess amount determined by Landlord to be attributable to the Premises to Tenant after deducting all other amounts due Landlord. Nothing contained in this Lease shall obligate Landlord to seek a refund or abatement of Taxes. Taxes shall not include any net income taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder. If any such Tax is levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant, If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand.

10. **Parking.** Subject to all matters of record, Force Majeure, a Taking (as defined in Section 19 below) and the exercise by Landlord of its rights hereunder, Landlord shall make available (and Tenant shall be required to pay for) its pro rata share of parking spaces at the Project on a nonexclusive basis at market rates in those areas of the surface parking lot of the Project designated for nonreserved parking, subject in each case to Landlord's rules and regulations. As of the date of this Lease, Tenant's pro rata share of parking spaces is equal to 5 parking spaces. Following the date of this Lease, Landlord shall not designate any spaces from unreserved to reserved parking spaces if the effect of such designation would reduce Tenant's pro rata share of parking spaces to less than 5 parking spaces. Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Tenant shall pay to Landlord or as directed by Landlord, monthly as Additional Rent hereunder, the market rate for the parking spaces, as reasonably determined by Landlord from time to time, which as of the date hereof shall be \$230.00 per space per month, which market rate shall not increase more than once in any 12 month period. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project.

11. **Utilities, Services.** Landlord shall provide, subject to the terms of this Section 11, water, electricity, heating, ventilation and air conditioning ("HVAC"), light, power, sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services) to the Premises and the Common Areas, and refuse and trash collection and janitorial services to the Common Areas (collectively, "Utilities"). Landlord shall pay, as part of Operating Expenses or subject to Tenant's reimbursement obligation below, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. Electricity serving the Premises is separately submetered and commencing on the Commencement Date, Tenant

shall pay for electricity consumed in the Premises based on such submeter. Landlord may cause, at Landlord's expense, any other Utilities to be separately metered or charged directly to Tenant by the provider. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services which may be furnished to Tenant or the Premises during the Term. Tenant shall pay, as part of Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. No interruption or failure of Utilities, from any cause whatsoever, shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Tenant may elect upon delivery of written notice to Landlord to obtain and pay directly for its own janitorial services for the Premises. Unless Tenant delivers Landlord written notice that it has elected to retain a third party to provide janitorial services to the Premises, Landlord shall provide janitorial services to the Premises and Landlord shall charge Tenant directly for such janitorial services. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

12. Alterations and Tenant's Property. Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems (as defined in Section 13) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems and shall not be otherwise unreasonably withheld or delayed. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Any request for approval shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, on demand an amount equal to 2% of all charges incurred by Tenant or its contractors or agents in connection with any Alteration to cover Landlord's overhead and expenses for plan review, coordination, scheduling and supervision. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

Except for Removable Installations (as hereinafter defined), all Installations (as hereinafter defined) shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term, and shall remain upon and be surrendered with the Premises as a part thereof. Notwithstanding the foregoing, Landlord may, at the time its approval of any such Installation is requested, notify Tenant that Landlord requires that Tenant remove such Installation upon the expiration or earlier termination of the Term, in which event Tenant shall remove such Installation in accordance with the immediately succeeding

sentence. Upon the expiration or earlier termination of the Term, Tenant shall remove (i) all wires, cables or similar equipment which Tenant has installed in the Premises or in the risers or plenums of the Building, (ii) any Installations for which Landlord has given Tenant notice of removal in accordance with the immediately preceding sentence, and (iii) all of Tenant's Property (as hereinafter defined), and Tenant shall restore and repair any damage caused by or occasioned as a result of such removal, including, without limitation, capping off all such connections behind the walls of the Premises and repairing any holes. During any restoration period beyond the expiration or earlier termination of the Term, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant. If Landlord is requested by Tenant or any lender, lessor or other person or entity claiming an interest in any of Tenant's Property to waive any lien Landlord may have against any of Tenant's Property, and Landlord consents to such waiver, then Landlord shall be entitled to be paid as administrative rent a fee of \$1,000 per occurrence for its time and effort in preparing and negotiating such a waiver of lien.

For purposes of this Lease, (x) "**Removable Installations**" means any items listed on **Exhibit F** attached hereto and any items agreed by Landlord in writing to be included on **Exhibit F** in the future, (y) "**Tenant's Property**" means Removable Installations and, other than Installations, any personal property or equipment of Tenant that may be removed without material damage to the Premises, and (z) "**Installations**" means all property of any kind paid for by Landlord, all Alterations, all fixtures, and all partitions, hardware, built-in machinery, built-in casework and cabinets and other similar additions, equipment, property and improvements built into the Premises so as to become an integral part of the Premises, including, without limitation, fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch.

13. **Landlord's Repairs.** Landlord, as an Operating Expense, shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including HVAC, plumbing, fire sprinklers, elevators and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (collectively, "**Tenant Parties**") excluded. Losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord, to the extent not covered by insurance, at Tenant's sole cost and expense. Landlord reserves the right to stop Building Systems services when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed. Landlord shall have no responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in case of emergency, make a commercially reasonable effort to give Tenant 24 hours advance notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall promptly give Landlord written notice of any repair required by Landlord pursuant to this Section, after which Landlord shall make a commercially reasonable effort to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18.

14. **Tenant's Repairs.** Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls, reasonable wear and tear and damage by fire or other casualty excepted. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be

reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

15. **Mechanic's Liens.** Tenant shall discharge, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant 10 days after Tenant receives notice of the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or creditor of Tenant will upon its face or by exhibit thereto indicate that such Financing Statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

16. **Indemnification.** Tenant hereby indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all Claims for injury or death to persons or damage to property occurring within or about the Premises, arising directly or indirectly out of use or occupancy of the Premises or a breach or default by Tenant in the performance of any of its obligations hereunder, unless caused solely by the willful misconduct or negligence of Landlord. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises). Tenant further waives any and all Claims for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party.

17. **Insurance.** Landlord shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project or such lesser coverage amount as Landlord may elect provided such coverage amount is not less than 90% of such full replacement cost. Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than \$2,000,000 for bodily injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for employees employed to perform services and insurance for any improvements installed by Tenant or which are in addition to the standard improvements customarily furnished by Landlord without regard to whether or not such are made a part of the Project. All such insurance shall be included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord based upon the insurer's cost calculations). Tenant shall also reimburse Landlord for any increased premiums or additional insurance which Landlord reasonably deems necessary as a result of Tenant's use of the Premises.

Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with such limits as required by law; and commercial general liability insurance, with a minimum

limit of not less than \$2,000,000 per occurrence for bodily injury and property damage with respect to the Premises. The commercial general liability insurance policy shall name Alexandria Real Estate Equities, Inc., and Landlord, its officers, directors, employees, managers, agents, invitees and contractors (collectively, "**Landlord Parties**"), as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Tenant shall (i) provide Landlord with 30 days advance written notice of cancellation of such commercial general liability policy, and (ii) request Tenant's insurer to endeavor to provide 30 days advance written notice to Landlord of cancellation of such commercial general liability policy (or 10 days in the event of a cancellation due to non-payment of premium). Copies of such policies (if requested by Landlord), or certificates of insurance showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant upon commencement of the Term and upon each renewal of said insurance. Tenant's policy may be a "blanket policy" with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 days prior to the expiration of such policies, furnish Landlord with renewal certificates.

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, agents, invitees and contractors ("**Related Parties**"), in connection with any loss or damage thereby insured against. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

Landlord may require insurance policy limits to be raised to conform with requirements of Landlord's lender and/or to bring coverage limits to levels then being generally required of new tenants within the Project; provided, however, that the increased amount of coverage is consistent with coverage amounts then being required by institutional owners of similar projects with tenants occupying similar size premises in the geographical area in which the Project is located.

18. Restoration. If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other insured casualty, Landlord shall notify Tenant within 60 days after discovery of such damage as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable (the "**Restoration Period**"). If the Restoration Period is estimated to exceed 9 months (the "**Maximum Restoration Period**"), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction; provided, however, that notwithstanding Landlord's election to restore, Tenant may elect to terminate this Lease by written notice to Landlord delivered within 5 business days of receipt of a notice

from Landlord estimating a Restoration Period for the Premises longer than the Maximum Restoration Period. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 30) in, on or about the Premises (collectively referred to herein as “**Hazardous Materials Clearances**”); provided, however, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Landlord may, in its sole and absolute discretion, elect not to proceed with such repair and restoration, or Tenant may by written notice to Landlord delivered within 5 business days of the expiration of the Maximum Restoration Period or, if longer, the Restoration Period, elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is 75 days after the later of: (i) discovery of such damage or destruction, or (ii) the date all required Hazardous Materials Clearances are obtained, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant.

Tenant, at its expense, shall promptly perform, subject to delays arising from the collection of insurance proceeds, from Force Majeure (as defined in Section 34) events or to obtain Hazardous Material Clearances, all repairs or restoration not required to be done by Landlord and shall promptly re-enter the Premises and commence doing business in accordance with this Lease. Notwithstanding the foregoing, either Landlord or Tenant may terminate this Lease upon written notice to the other if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 2 months to repair such damage; provided, however, that such notice is delivered within 10 business days after the date that Landlord provides Tenant with written notice of the estimated Restoration Period. Landlord shall also have the right to terminate this Lease if insurance proceeds are not available for such restoration. Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises are repaired and restored, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant’s business. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18, Tenant waives any right to terminate the Lease by reason of damage or casualty loss.

The provisions of this Lease, including this Section 18, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 18 sets forth their entire understanding and agreement with respect to such matters.

19. Condemnation. If the whole or any material part of the Premises or the Project is taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a “**Taking**” or “**Taken**”), and the Taking would in Landlord’s reasonable judgment, either prevent or materially interfere with Tenant’s use of the Premises or materially interfere with or impair Landlord’s ownership or operation of the Project, then upon written notice by Landlord this Lease shall terminate and Rent shall be apportioned as of said date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant’s Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be reduced to such extent as may be fair and reasonable under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award

from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.

20. **Events of Default.** Each of the following events shall be a default ("**Default**") by Tenant under this Lease:

(a) **Payment Defaults.** Tenant shall fail to pay any installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent within 5 business days of any such notice not more than once in any 12 month period.

(b) **Insurance.** Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration of the current coverage.

(c) **Abandonment.** Tenant shall abandon the Premises.

(d) **Improper Transfer.** Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(e) **Liens.** Tenant shall fail to discharge or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 10 days after any such lien is filed against the Premises.

(f) **Insolvency Events.** Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(g) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 5 days after a second notice requesting such document.

(h) **Other Defaults.** Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 10 days after written notice thereof from Landlord to Tenant.

Any notice given under Section 20(h) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice; provided that if the nature of Tenant's default pursuant to

Section 20(h) is such that it cannot be cured by the payment of money and reasonably requires more than 10 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 10 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 90 days from the date of Landlord's notice.

21. Landlord's Remedies.

(a) **Payment By Landlord; Interest.** Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law (the "**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) **Late Payment Rent.** Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum of 6% of the overdue Rent as a late charge. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.

(c) **Remedies.** Upon the occurrence of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever. No cure in whole or in part of such Default by Tenant after Landlord has taken any action beyond giving Tenant notice of such Default to pursue any remedy provided for herein (including retaining counsel to file an action or otherwise pursue any remedies) shall in any way affect Landlord's right to pursue such remedy or any other remedy provided Landlord herein or under law or in equity, unless Landlord, in its sole discretion, elects to waive such Default.

(i) This Lease and the Term and estate hereby granted are subject to the limitation that whenever a Default shall have happened and be continuing, Landlord shall have the right, at its election, then or thereafter while any such Default shall continue and notwithstanding the fact that Landlord may have some other remedy hereunder or at law or in equity, to give Tenant written notice of Landlord's intention to terminate this Lease on a date specified in such notice, which date shall be not less than 5 days after the giving of such notice, and upon the date so specified, this Lease and the estate hereby granted shall expire and terminate with the same force and effect as if the date specified in such notice were the date hereinbefore fixed for the expiration of this Lease, and all right of Tenant hereunder shall expire and terminate, and Tenant shall be liable as hereinafter in this Section 21(c) provided. If any such notice is given, Landlord shall have, on such date so specified, the right of re-entry and possession of the Premises and the right to remove all persons and property therefrom and to store such property in a warehouse or elsewhere at the risk and expense, and for the account, of Tenant. Should Landlord elect to re-enter as herein provided or should Landlord take possession pursuant to legal proceedings or pursuant to any notice provided for by law, Landlord may from time to time re-let the Premises or any part thereof for such term or terms and at such rental or rentals and upon such terms and conditions as Landlord may deem advisable, with the right to make commercially reasonable alterations in and repairs to the Premises.

(ii) In the event of any termination of this Lease as in this Section 21 provided or as required or permitted by law or in equity, Tenant shall forthwith quit and surrender the Premises to Landlord, and Landlord may, without further notice, enter upon, re-enter, possess and repossess the same by summary proceedings, ejectment or otherwise, and again have, repossess and enjoy the same as if this Lease had not been made, and in any such event Tenant and no person claiming through or under Tenant by virtue of any law or an order of any court shall be entitled to possession or to remain in possession of the Premises. Landlord, at its option, notwithstanding any other provision of this Lease, shall be entitled to recover from Tenant, as and for liquidated damages, the sum of:

(A) all Base Rent, Additional Rent and other amounts payable by Tenant hereunder then due or accrued and unpaid; and

(B) the amount equal to the aggregate of all unpaid Base Rent and Additional Rent which would have been payable if this Lease had not been terminated prior to the end of the Term then in effect, discounted to its then present value in accordance with accepted financial practice using a rate of 5% per annum, for loss of the bargain; and

(C) all other damages and expenses (including attorneys' fees and expenses), if any, which Landlord shall have sustained by reason of the breach of any provision of this Lease; less

(D) the net proceeds of any re-letting actually received by Landlord and the amount of damages which Tenant proves could have been avoided had Landlord taken reasonable steps to mitigate its damages.

(iii) Nothing herein contained shall limit or prejudice the right of Landlord, in any bankruptcy or insolvency proceeding, to prove for and obtain as liquidated damages by reason of such termination an amount equal to the maximum allowed by any bankruptcy or insolvency proceedings, or to prove for and obtain as liquidated damages by reason of such termination, an amount equal to the maximum allowed by any statute or rule of law, but in each case not more than the amount to which Landlord would otherwise be entitled under this Section 21.

(iv) Nothing in this Section 21 shall be deemed to affect the right of either party to indemnifications pursuant to this Lease.

(v) If Landlord terminates this Lease upon the occurrence of a Default, Tenant will quit and surrender the Premises to Landlord or its agents, and Landlord may, without further notice, enter upon, re-enter and repossess the Premises by summary proceedings, ejectment or otherwise. The words "enter", "re-enter", and "re-entry" are not restricted to their technical legal meanings.

(vi) If either party shall be in default in the observance or performance of any provision of this Lease, and an action shall be brought for the enforcement thereof, the non-prevailing party shall pay to the prevailing party all fees, costs and other expenses which may become payable as a result thereof or in connection therewith, including attorneys' fees and expenses.

(vii) If Tenant shall default in the keeping, observance or performance of any covenant, agreement, term, provision or condition herein contained, Landlord, without thereby waiving such default, may perform the same for the account and at the expense of Tenant (a) immediately or at any time thereafter and without notice in the case of emergency or in case such default will result in a violation of any legal or insurance requirements, or in the imposition of any lien against all or any portion of the Premises (but only after Tenant has failed to respond to such

lien as permitted by Section 15 within the time period provided in Section 15), and (b) in any other case if such default continues after any applicable notice and cure period provided in Section 21. All reasonable costs and expenses incurred by Landlord in connection with any such performance by it for the account of Tenant and also all reasonable costs and expenses, including attorneys' fees and disbursements incurred by Landlord in any action or proceeding (including any summary dispossess proceeding) brought by Landlord to enforce any obligation of Tenant under this Lease and/or right of Landlord in or to the Premises, shall be paid by Tenant to Landlord within 10 days after demand.

(viii) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in Section 30(d), at Tenant's expense, to the extent provided in Section 30(d).

(d) Except as otherwise provided in this Section 21, no right or remedy herein conferred upon or reserved to Landlord is intended to be exclusive of any other right or remedy, and every right and remedy shall be cumulative and in addition to any other legal or equitable right or remedy given hereunder, or now or hereafter existing. No waiver of any provision of this Lease shall be deemed to have been made unless expressly so made in writing. Landlord shall be entitled, to the extent permitted by law, to seek injunctive relief in case of the violation, or attempted or threatened violation, of any provision of this Lease, or to seek a decree compelling observance or performance of any provision of this Lease, or to seek any other legal or equitable remedy.

22. Assignment and Subletting.

(a) **General Prohibition.** Without Landlord's prior written consent subject to and on the conditions described in this Section 22, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof which are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 50% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities which were owners thereof at time of execution of this Lease to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability company at time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22. Notwithstanding the foregoing, any public offering of shares or other ownership interest in Tenant or any private equity financing by one or more investors who regularly invest in private biotechnology companies for which Tenant has given Landlord prior written notice, shall not be deemed an assignment; Such prior written notice shall be treated by Landlord as confidential information.

(b) **Permitted Transfers.** If Tenant desires to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises other than pursuant to a Permitted Assignment (as defined below), then at least 15 business days, but not more than 45 business days, before the date Tenant desires the assignment or sublease to be effective (the "**Assignment Date**"), Tenant shall give Landlord a notice (the "**Assignment Notice**") containing such information about the proposed assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, (ii) refuse such consent, in its reasonable discretion; or (iii) terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an "**Assignment**

Termination”). Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (1) the proposed assignee or subtenant is a governmental agency; (2) in Landlord’s reasonable judgment, the use of the Premises by the proposed assignee or subtenant would entail any alterations that would lessen the value of the leasehold improvements in the Premises, or would require increased services by Landlord; (3) in Landlord’s reasonable judgment, the proposed assignee or subtenant is engaged in areas of scientific research or other business concerns that are controversial; (4) in Landlord’s reasonable judgment, the proposed assignee or subtenant lacks the creditworthiness to support the financial obligations it will incur under the proposed assignment or sublease; (5) in Landlord’s reasonable judgment, the character, reputation, or business of the proposed assignee or subtenant is inconsistent with the desired tenant-mix or the quality of other tenancies in the Project or is inconsistent with the type and quality of the nature of the Building; (6) Landlord has received from any prior landlord to the proposed assignee or subtenant a negative report concerning such prior landlord’s experience with the proposed assignee or subtenant; (7) Landlord has experienced previous defaults by or is in litigation with the proposed assignee or subtenant; (8) the use of the Premises by the proposed assignee or subtenant will violate any applicable Legal Requirement; (9) the proposed assignee or subtenant, or any entity that, directly or indirectly, controls, is controlled by, or is under common control with the proposed assignee or subtenant, is then an occupant of the Project; (10) the proposed assignee or subtenant is an entity with whom Landlord is negotiating to lease space in the Project; or (11) the assignment or sublease is prohibited by Landlord’s lender. If Landlord delivers notice of its election to exercise an Assignment Termination, Tenant shall have the right to withdraw such Assignment Notice by written notice to Landlord of such election within 5 business days after Landlord’s notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord’s consent to the proposed assignment, sublease or other transfer. Tenant shall pay to Landlord a fee equal to One Thousand Five Hundred Dollars (\$1,500) in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents. Notwithstanding the foregoing, Landlord’s consent to an assignment of this Lease or a subletting of any portion of the Premises to any entity controlling, controlled by or under common control with Tenant (a **“Permitted Assignment”**) shall not be required, provided that Landlord shall have the right to approve the form of any such sublease or assignment. In addition, Tenant shall have the right to assign this Lease, upon 30 days prior written notice to Landlord but without obtaining Landlord’s prior written consent, to a corporation or other entity which is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership interests of Tenant provided that (i) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring the Lease, and (ii) the net worth (as determined in accordance with generally accepted accounting principles (**“GAAP”**)) of the assignee is not less than the greater of the net worth (as determined in accordance with GAAP) of Tenant as of (A) the Commencement Date, or (B) as of the date of Tenant’s most current quarterly or annual financial statements, and (iii) such assignee shall agree in writing to assume all of the terms, covenants and conditions of this Lease arising after the effective date of the assignment (a **“Corporate Permitted Assignment”**). Control Permitted Assignments and Corporate Permitted Assignments are hereinafter referred to as **“Permitted Assignments.”**

(c) **Additional Conditions.** As a condition to any such assignment or subletting, whether or not Landlord’s consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in Default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under the Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) A list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) **No Release of Tenant, Sharing of Excess Rents.** Notwithstanding any assignment or subletting, tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the sum of the rental payable under this Lease, (excluding however, any Rent payable under this Section) and actual and reasonable brokerage fees, legal costs and any design or construction fees directly related to and required pursuant to the terms of any such sublease) ("**Excess Rent**"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and Landlord as assignee and as attorney-in-fact for Tenant, or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.

(e) **No Waiver.** The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under the Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 22, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

23. **Estoppel Certificate.** Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a

proposed lender or purchaser, (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging that there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Lease or the Premises as may be requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part. Tenant's failure to deliver such statement within such time shall, at the option of Landlord, constitute a Default under this Lease, and, in any event, shall be conclusive upon Tenant that the Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution.

24. **Quiet Enjoyment.** So long as Tenant shall perform all of the covenants and agreements herein required to be performed by Tenant, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

25. **Prorations.** All prorations required or permitted to be made hereunder shall be made on the basis of a 360 day year and 30 day months.

26. **Rules and Regulations.** Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project. The current rules and regulations are attached hereto as **Exhibit E**. If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

27. **Subordination.** This Lease and Tenant's interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate non-disturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Notwithstanding the foregoing, any such Holder may at any time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. The term "**Mortgage**" whenever used in this Lease shall be deemed to include deeds of trust, security assignments and any other encumbrances, and any reference to the "**Holder**" of a Mortgage shall be deemed to include the beneficiary under a deed of trust. Upon written request from Tenant, Landlord shall endeavor to obtain for execution by Tenant a commercially reasonable form of non-disturbance and attornment agreement executed by the Holder of any future Mortgage with a lien on the Project which provides, among other things, that so long as Tenant is not in Default of its obligations under this Lease, foreclosure or other enforcement of such Mortgage shall not terminate this Lease and the successor to Landlord's interest in the Project shall recognize this Lease and Tenant's right to possession of the Premises. Landlord's failure to cause the Holder to enter into the SNDA with Tenant shall not be a default by Landlord under this Lease.

28. **Surrender.** Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to any Alterations or Installations permitted by Landlord to remain in the Premises, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than a Landlord Party (collectively, "**Tenant HazMat Operations**") and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Sections 18 and 19 excepted. At least 3 months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the "**Surrender Plan**"). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of the Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of-pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed \$2,500. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 28.

Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. **Waiver of Jury Trial.** TO THE EXTENT PERMITTED BY LAW, TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HERewith OR THE TRANSACTIONS RELATED HERETO.

30. Environmental Requirements.

(a) **Prohibition/Compliance.** Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by anyone other than Landlord and Landlord's employees, agents and contractors otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "**Environmental Claims**") which arise during or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises or the Project. Notwithstanding anything to the contrary contained in this Section 30(a), Tenant shall not be responsible for the clean up or remediation of, and the indemnification and hold harmless obligation set forth in this paragraph shall not apply to contamination on the Project or in the Premises that Tenant can demonstrate to Landlord's reasonable satisfaction was present on the Project or in the Premises prior to the date of this Lease, except in any case to the extent Tenant and/or any of the Tenant Parties have exacerbated or contributed to such contamination, and provided that it is understood that Tenant shall have the burden of proof with respect to whether such contamination was present on the Project or in the Premises prior to the date of this Lease.

(b) **Business.** Landlord acknowledges that it is not the intent of this Section 30 to prohibit Tenant from using the Premises for the Permitted Use. Tenant may operate its business according to prudent industry practices so long as the use or presence of Hazardous Materials is strictly and properly monitored according to all then applicable Environmental Requirements. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("**Hazardous Materials List**"). Tenant shall deliver to Landlord an updated Hazardous Materials List at least once a year and shall also deliver an updated list before any new

Hazardous Material is brought onto, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises. Tenant shall deliver to Landlord true and correct copies of the following documents (the "**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a Governmental Authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks; and a Surrender Plan (to the extent surrender in accordance with Section 28 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. It is not the intent of this Section to provide Landlord with information which could be detrimental to Tenant's business should such information become possessed by Tenant's competitors.

(c) **Tenant Representation and Warranty.** Tenant hereby represents and warrants to Landlord that (i) neither Tenant nor any of its legal predecessors has been required by any prior landlord, lender or Governmental Authority at any time to take remedial action in connection with Hazardous Materials contaminating a property which contamination was permitted by Tenant of such predecessor or resulted from Tenant's or such predecessor's action or use of the property in question, and (ii) Tenant is not subject to any enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority). If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion.

(d) **Testing.** Landlord shall have access to, and a right to perform inspections and tests of, the Premises to determine Tenant's compliance with Environmental Requirements, its obligations under this Section 30, or the environmental condition of the Premises or the Project. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. Access to the Premises shall be granted to Landlord upon Landlord's prior notice to Tenant and at such times so as to minimize, so far as may be reasonable under the circumstances, any disturbance to Tenant's operations. Such inspections and tests shall be conducted at Landlord's expense, unless such inspections or tests reveal that Tenant has not complied with any Environmental Requirement, in which case Tenant shall reimburse Landlord for the reasonable cost of such inspection and tests. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions for which Tenant is responsible pursuant to this Section 30 and that are identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights that Landlord may have against Tenant.

(e) **Control Areas.** Tenant shall be allowed to utilize up to its pro rata share of the Hazardous Materials inventory within any control area or zone (located within the Premises), as designated by the applicable building code, for chemical use or storage. As used in the preceding sentence, Tenant's pro rata share of any control areas or zones located within the Premises shall be determined based on the rentable square footage that Tenant leases within the applicable control area or zone. For purposes of example only, if a control area or zone contains 10,000 rentable square feet and 2,000 rentable square feet of a tenant's premises are located within such control area or zone (while such premises as a whole contains 5,000 rentable square feet), the applicable tenant's pro rata share of such control area would be 20%.

(f) **Underground Tanks.** If underground or other storage tanks storing Hazardous Materials located on the Premises or the Project are used by Tenant or are hereafter placed on the Premises or the Project by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other actions necessary or required under applicable state and federal Legal Requirements, as such now exists or may hereafter be adopted or amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks.

(g) **Tenant's Obligations.** Tenant's obligations under this Section 30 shall survive the expiration or earlier termination of the Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials for which Tenant is responsible under this Lease (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(h) **Definitions.** As used herein, the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, of environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term "**Hazardous Materials**" means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "**operator**" of Tenant's "**facility**" and the "**owner**" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

31. **Tenant's Remedies/Limitation of Liability.** Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term "**Landlord**" in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner's ownership.

32. **Inspection and Access.** Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be

required or permitted pursuant to this Lease and for any other business purpose. Landlord and Landlord's representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants. Landlord may erect a suitable sign on the Premises stating the Premises are available to let or that the Project is available for sale. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Premises, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant's use or occupancy of the Premises for the Permitted Use. At Landlord's request, Tenant shall execute such instruments as may be necessary for such easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord's access rights hereunder.

33. **Security.** Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

Subject to the provisions of this paragraph, Tenant shall have the right to provide, install, replace, maintain and remove its own security system within the Premises during the Term of the Lease, so long as such security system does not materially interfere with the rights or use of the Building or the Project by other tenants or occupants. Notwithstanding anything to the contrary contained herein, any security systems or related equipment that Tenant desires to install pursuant to this paragraph shall be treated as Alterations and shall be undertaken pursuant to Section 12 of the Lease. Tenant shall remove any security systems and related equipment installed by Tenant at the end of the Term and Tenant shall restore and repair any damage caused by or occasioned as a result of such removal.

34. **Force Majeure.** Landlord shall not be responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, sinkholes or subsidence, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond the reasonable control of Landlord ("**Force Majeure**").

35. **Brokers.** Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no Broker brought about this transaction, other than Richards Barry Joyce & Partners, LLC and Cushman & Wakefield. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than the broker, if any named in this Section 35, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

36. **Limitation on Landlord's Liability.** NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR

(AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LANDLORD IN CONNECTION WITH THIS LEASE NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

37. **Severability.** If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable.

38. **Signs; Exterior Appearance.** Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can be viewed from the exterior of the Premises. Standard signage at the main entrance of the Building (on First Street), at the Binney Street Entrance and on the Building directory shall be inscribed, painted or affixed for Tenant by Landlord, at Landlord's cost and expense, and shall be in a location and of a size, color and type acceptable to Landlord. Suite entry signage shall be inscribed, painted or affixed for Tenant by Landlord, at Tenant's cost and expense, and shall be in a allocation and of a size, color and type acceptable to Landlord. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The directory tablet shall be provided exclusively for the display of the name and location of tenants.

39. **Right to Extend Term.** Tenant shall have the right to extend the Term of the Lease upon the following terms and conditions:

(a) **Extension Right.** Subject to the provisions of this Section 39, Tenant shall have 1 right ("**Extension Right**") to extend the term of this Lease for 1 year ("**Extension Term**") on the same terms and conditions as this Lease (other than with respect to Base Rent) by giving Landlord written notice of its election to exercise such Extension Right at least 6 months prior to the expiration of the Base Term of the Lease. Notwithstanding anything to the contrary contained herein, Tenant shall have no right to exercise the Extension Right if the term of this Lease is extended as provided for in the second paragraph of Section 40(a) below.

Base Rent shall be adjusted on the commencement date of such Extension Term by multiplying the Base Rent payable immediately before such Extension Term by 3% and adding the resulting amount to the Base Rent payable immediately before such Extension Term. In addition, Landlord may impose a market rent for the parking rights provided hereunder. Tenant acknowledges and agrees that, if Tenant has elected to exercise the Extension Right by delivering notice to Landlord as required in this Section 39(a), Tenant shall have no right thereafter to rescind or elect not to extend the term of the Lease for the Extension Term.

(b) **Rights Personal.** The Extension Right is personal to Tenant and is not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease, except that it may be assigned in connection with any Permitted Assignment of this Lease.

(c) **Exceptions.** Notwithstanding anything set forth above to the contrary, the Extension Right shall not be in effect and Tenant may not exercise the Extension Right:

(i) during any period of time that Tenant is in Default under any provision of this Lease; or

(ii) if Tenant has been in Default under any provision of this Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, whether or not the Defaults are cured.

(d) **No Extensions.** The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.

(e) **Termination.** The Extension Right shall, at Landlord's option, terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such Defaults are cured.

40. Right to Expand.

(a) **Expansion in the Building.** Subject to the terms of this Section 40, Tenant shall have the right, but not the obligation, to expand the Premises (the "**Expansion Right**") to include any Available Space in the Building upon the terms and conditions in this Section. For purposes of this Section 40(a), "**Available Space**" shall mean Suite 1B of the Building, consisting of 4,372 rentable square feet on the first floor of the Building, which is not occupied by a tenant or which is occupied by an existing tenant whose lease is expiring within 6 months or less and such tenant does not wish to renew (whether or not such tenant has a right to renew) its occupancy of such space. If there is any Available Space in the Building, Landlord shall, at such time as Landlord shall elect so long as Tenant's rights hereunder are preserved, deliver to Tenant written notice (the "**Expansion Notice**") of such Available Space, together with the terms and conditions on which Landlord is prepared to lease Tenant such Available Space. The term of the lease for the Available Space shall be coterminous with the original Premises. Tenant shall have 3 business days following receipt of the Expansion Notice to deliver to Landlord written notification of Tenant's exercise of the Expansion Right. If Tenant fails to exercise its Expansion Right, Landlord shall not be required to re-offer the Available Space to Tenant until (assuming Landlord fails to lease the Available Space to another tenant) at least 6 months have passed following the Expansion Notice and/or the space becomes Available Space again after having been leased to another tenant (and such tenant does not wish to renew whether or not such tenant has a right to renew). Tenant acknowledges that Landlord is currently attempting to lease the Available Space to other third parties and that, notwithstanding anything to the contrary contained herein, Landlord shall have no obligation to provide Tenant with an Expansion Notice and the Expansion Right shall not apply to any leases entered into for the Available Space with other third parties in 2012 (even though such leases may provide for lease terms commencing in 2013 and extending for the term of this Lease, such that Tenant may never have the right to exercise its Expansion Right).

Notwithstanding anything to the contrary contained herein, as a condition to leasing the Available Space to Tenant, Landlord shall have the right to require Tenant to extend the term of this Lease until December 31, 2016, in which case Tenant shall continue to lease the original Premises on all of the terms and conditions of this Lease except that Base Rent for the original Premises shall be adjusted on the first day of the 25th month after the Commencement Date and on each annual anniversary thereof (each, an “**Adjustment Date**”) by multiplying the Base Rent payable immediately before such Adjustment Date by 3% and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Tenant shall be required to pay Base Rent for the Available Space as provided for in the Expansion Notice. In addition, Landlord may impose a market rent for the parking rights provided hereunder.

(b) **Amended Lease.** If: (i) Tenant fails to timely deliver notice accepting the terms of an Expansion Notice, or (ii) after the expiration of a period of 10 days from the date Tenant gives notice accepting Landlord’s offer to lease such Available Space, no lease amendment or lease agreement for the Available Space (and if Landlord so elects for the extension of the original Premises as provided for in the second paragraph of Section 40(a)) has been executed, and Landlord tenders to Tenant an amendment to this Lease setting forth the terms for the rental of the Available Space consistent with those set forth in the Expansion Notice and otherwise consistent with the terms of this Lease and Tenant fails to execute such Lease amendment within 5 business days following such tender, Tenant shall be deemed to have forever waived its right to lease the Available Space.

(c) **Exceptions.** Notwithstanding the above, the Expansion Right shall, at Landlord’s option, not be in effect and may not be exercised by Tenant:

(i) during any period of time that Tenant is in Default under any provision of the Lease; or

(ii) if Tenant has been in Default under any provision of the Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period prior to the date on which Tenant seeks to exercise the Expansion Right.

(d) **Termination.** The Expansion Right shall, at Landlord’s option, terminate and be of no further force or effect even after Tenant’s due and timely exercise of the Expansion Right if, after such exercise, but prior to the commencement date of the lease of such Available Space, (i) Tenant fails to timely cure any default by Tenant under the Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Expansion Right to the date of the commencement of the lease of the Available Space, whether or not such Defaults are cured.

(e) **Rights Personal.** Expansion Rights are personal to Tenant and are not assignable without Landlord’s consent, which may be granted or withheld in Landlord’s sole discretion separate and apart from any consent by Landlord to an assignment of Tenant’s interest in the Lease, except that they may be assigned in connection with any Permitted Assignment of this Lease.

(f) **No Extensions.** The period of time within which any Expansion Rights may be exercised shall not be extended or enlarged by reason of Tenant’s inability to exercise the Expansion Rights.

41. **Asbestos.**

(a) **Notification of Asbestos.** Landlord hereby notifies Tenant of the presence of asbestos-containing materials (“**ACMs**”) and/or presumed asbestos-containing materials (“**PACMs**”) within or about the Premises in the location identified in **Exhibit G**.

(b) **Tenant Acknowledgement.** Tenant hereby acknowledges receipt of the notification in paragraph (a) of this Section 41 and understands that the purpose of such notification is to make Tenant and any agents, employees, and contractors of Tenant, aware of the presence of ACMs and/or PACMs within or about the Building in order to avoid or minimize any damage to or disturbance of such ACMs and/or PACMs.

/s/ FB

Tenant's Initials

(c) **Acknowledgement from Contractors/Employees.** Tenant shall give Landlord at least 14 days' prior written notice before conducting, authorizing or permitting any of the activities listed below within or about the Premises, and before soliciting bids from any person to perform such services. Such notice shall identify or describe the proposed scope, location, date and time of such activities and the name, address and telephone number of each person who may be conducting such activities. Thereafter, Tenant shall grant Landlord reasonable access to the Premises to determine whether any ACMs or PACMs will be disturbed in connection with such activities. Tenant shall not solicit bids from any person for the performance of such activities without Landlord's prior written approval. Upon Landlord's request, Tenant shall deliver to Landlord a copy of a signed acknowledgement from any contractor, agent, or employee of Tenant acknowledging receipt of information describing the presence of ACMs and/or PACMs within or about the Premises in the locations identified in **Exhibit G** prior to the commencement of such activities. Nothing in this Section 41 shall be deemed to expand Tenant's rights under the Lease or otherwise to conduct, authorize or permit any such activities.

(i) Removal of thermal system insulation ("TSI") and surfacing ACMs and PACMs (i.e., sprayed-on or troweled-on material, e.g., textured ceiling paint or fireproofing material);

(ii) Removal of ACMs or PACMs that are not TSI or surfacing ACMs or PACMs; or

(iii) Repair and maintenance of operations that are likely to disturb ACMs or PACMs.

42. Miscellaneous.

(a) **Notices.** All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Joint and Several Liability.** If and when included within the term "**Tenant**," as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.

(c) **Financial Information.** Tenant shall furnish Landlord with true and complete copies of (i) Tenant's most recent audited annual financial statements within 90 days of the end of each of Tenant's fiscal years during the Term, (ii) Tenant's most recent unaudited quarterly financial statements within 45 days of the end of each of Tenant's first three fiscal quarters of each of Tenant's fiscal years during the Term, (iii) at Landlord's request from time to time, updated business plans, including cash flow projections and/or pro forma balance sheets and income statements, all of which shall be treated by Landlord as confidential information belonging to Tenant, (iv) corporate brochures and/or profiles prepared by Tenant for prospective investors, and (v) any other financial information or summaries that Tenant typically provides to its lenders or shareholders. Notwithstanding the foregoing, in no event shall Tenant be required to provide any financial information to Landlord which Tenant does not otherwise prepare (or cause to be prepared) for its own purposes.

(d) **Recordation.** Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease.

(e) **Interpretation.** The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(f) **Not Binding Until Executed.** The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(g) **Limitations on Interest.** It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(h) **Choice of Law.** Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(i) **Time.** Time is of the essence as to the performance of Tenant's obligations under this Lease.

(j) **OFAC.** Tenant, and all beneficial owners of Tenant, are currently (a) in compliance with and shall at all times during the Term of this Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

(k) **Incorporation by Reference.** All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.

(l) **Entire Agreement.** This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, letters of intent, negotiations and discussions, whether oral or written, of the parties, and there are no warranties, representations or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein.

(m) **No Accord and Satisfaction.** No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of

the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.

(n) **Hazardous Activities.** Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

[Signatures on next page]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

TENANT:

SERES HEALTH, INC.,
a Delaware corporation

/s/ Frank Bobe

By: FRANK BOBE

Its: CEO

LANDLORD:

ARE-MA REGION NO. 21, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

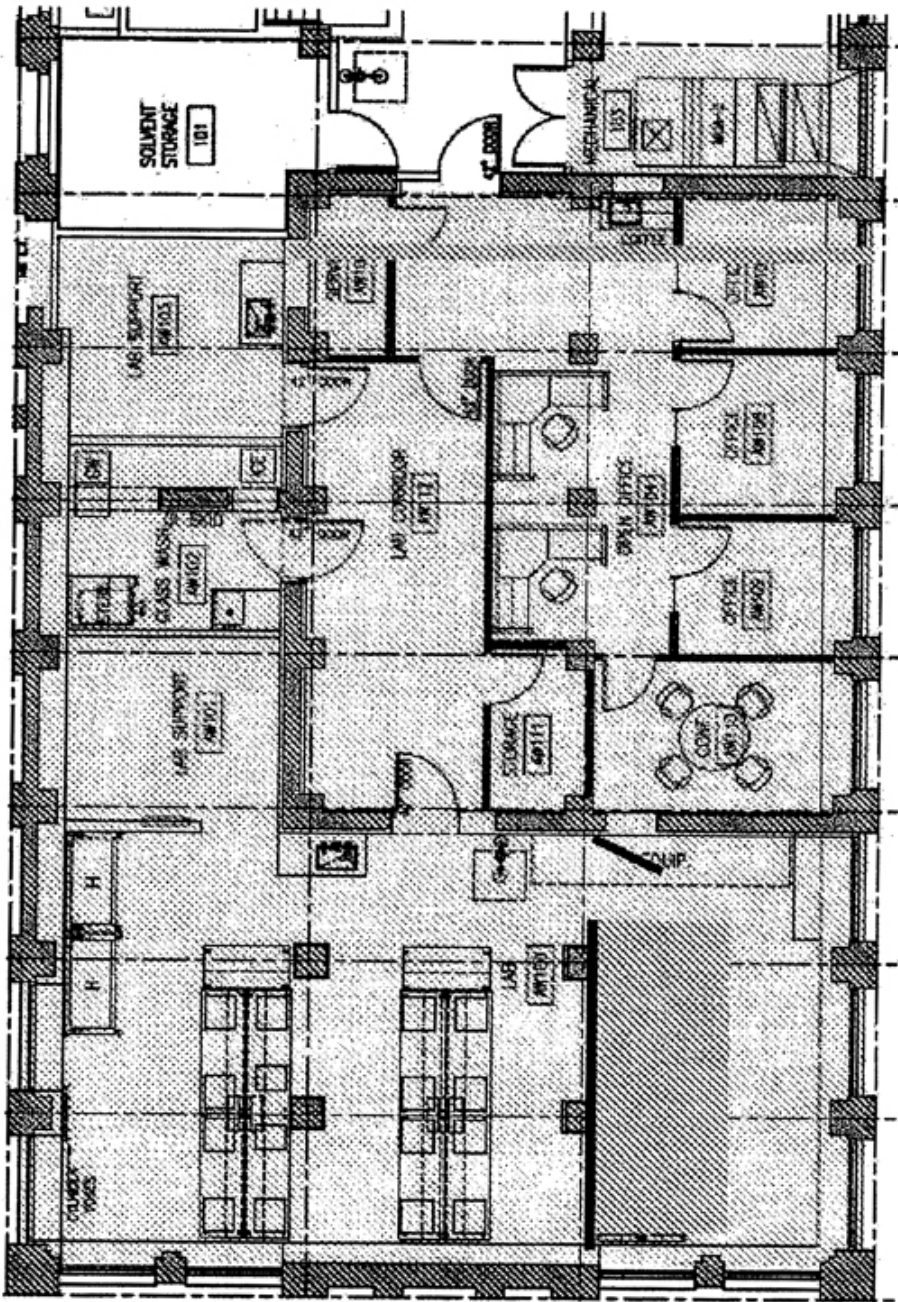
By: /s/ Eric S. Johnson

Its: Eric S. Johnson

Vice President
Real Estate Legal Affairs

EXHIBIT A TO LEASE

DESCRIPTION OF PREMISES



Suite 1A

EXHIBIT B TO LEASE

DESCRIPTION OF PROJECT

That certain parcel of land with the building thereon situated on First Street, Binney Street and Rogers Street in said Cambridge, Middlesex County, Commonwealth of Massachusetts, and bounded and described as follows:

NORTHERLY: By Rogers Street, two hundred (200) feet;

EASTERLY: By First Street, one hundred and ninety-nine and $74/100$ (199.74) feet;

SOUTHERLY: By Binney Street, one hundred ninety-nine and (199.71) feet;

WESTERLY: By land now or formerly of Leon B. Newman, Trustee, one hundred ninety-nine and $87/100$ (199.87) feet.

NOTE: As herein used, "recorded" shall mean "recorded with the Middlesex South District Registry of Deeds."

EXHIBIT C TO LEASE

INTENTIONALLY OMITTED

EXHIBIT D TO LEASE

ACKNOWLEDGMENT OF COMMENCEMENT DATE

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made this day of , , between **ARE-MA REGION NO. 21, LLC**, a Delaware limited liability company ("**Landlord**"), and **SERES HEALTH, INC.**, a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease dated , (the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date of the Base Term of the Lease is , and the termination date of the Base Term of the Lease shall be midnight on , . In case of a conflict between the terms of the Lease and the terms of this Acknowledgment of Commencement Date, this Acknowledgment of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this **ACKNOWLEDGMENT OF COMMENCEMENT DATE** to be effective on the date first above written.

TENANT:

SERES HEALTH, INC.,
a Delaware corporation

By: _____
Its: _____

LANDLORD:

ARE-MA REGION NO. 21, LLC,
a Delaware limited liability company

By: **ALEXANDRIA REAL ESTATE EQUITIES, L.P.**,
a Delaware limited partnership,
managing member

By: **ARE-QRS CORP.**,
a Maryland corporation,
general partner

By: _____
Its: _____

EXHIBIT E TO LEASE**Rules and Regulations**

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.
2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.
3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.
4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.
5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.
6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.
7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.
8. Tenant shall maintain the Premises free from rodents, insects and other pests.
9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.
10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.
11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.
12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.

13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.

14. No auction, public or private, will be permitted on the Premises or the Project.

15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.

16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.

EXHIBIT F TO LEASE

TENANT'S PERSONAL PROPERTY

Autoclave with steam generator
Deionized water system, with wall unit and dispenser
Glassware washer
lyophilizer
Ice machine
Wall mountings for gas cylinders
Office desks

Notwithstanding the inclusion of any item above, Tenant may only remove the item if it was paid for and brought onto the Premises by Tenant.

EXHIBIT G TO LEASE**ASBESTOS DISCLOSURE****NOTIFICATION OF THE PRESENCE OF ASBESTOS CONTAINING MATERIALS**

This notification provides certain information about asbestos within or about the Premises at 161 First Street, Cambridge, MA. ("Building").

Historically, asbestos was commonly used in building products used in the construction of buildings across the country. Asbestos-containing building products were used because they are fire-resistant and provide good noise and temperature insulation. Because of their prevalence, asbestos-containing materials, or ACMs, are still sometimes found in buildings today.

No ACMs were identified in an asbestos survey of the Building conducted in 2004. However, to avoid damage, roofing materials were not sampled. These materials are considered presumed asbestos containing materials (PACMs) and observed to be in good condition and may be managed in place.

Because ACMs and PACMs may be present and may continue to be present within or about the Building, we have hired an independent environmental consulting firm to prepare an operations and maintenance program ("O&M Program"). The O&M Program is designed to minimize the potential of any harmful asbestos exposure to any person within or about the Building. The O&M Program includes a description of work methods to be taken in order to maintain any ACMs or PACMs within or about the Building in good condition and to prevent any significant disturbance of such ACMs or PACMs. Appropriate personnel receive regular periodic training on how to properly administer the O&M Program.

The O&M Program describes the risks associated with asbestos exposure and how to prevent such exposure through appropriate work practices. ACMs and PACMs generally are not thought to be a threat to human health unless asbestos fibers are released into the air and inhaled. This does not typically occur unless (1) the ACMs are in a deteriorating condition, or (2) the ACMs have been significantly disturbed (such as through abrasive cleaning, or maintenance or renovation activities). If inhaled, asbestos fibers can accumulate in the lungs and, as exposure increases, the risk of disease (such as asbestosis or cancer) increases. However, measures to minimize exposure, and consequently minimize the accumulation of asbestos fibers, reduce the risks of adverse health effects.

The O&M Program describes a number of activities that should be avoided in order to prevent a release of asbestos fibers. In particular, you should be aware that some of the activities which may present a health risk include moving, drilling, boring, or otherwise disturbing ACMs. Consequently, such activities should not be attempted by any person not qualified to handle ACMs.

The O&M Program is available for review during regular business hours at Landlord's office located at 700 Technology Square, Suite 302, Cambridge, MA 02139.

LEASE AGREEMENT

THIS LEASE AGREEMENT (this “**Lease**”) is made this 1st day of April, 2015, between **ARE-MA REGION NO. 38, LLC**, a Delaware limited liability company (“**Landlord**”), and **SERES HEALTH, INC.**, a Delaware corporation (“**Tenant**”).

BASIC LEASE PROVISIONS

Address:	215 First Street, Cambridge, MA 02142
Premises:	That portion of the Building (as defined below), containing approximately 7,484 rentable square feet, consisting of (i) Suite 440, and (ii) that certain storage area located on the first floor of the Building (“ Storage Area ”), as shown on Exhibit A .
Shared Science Facility:	That portion of the Building depicted as the “Shared Science Facility” on Exhibit B attached hereto, subject to adjustment and relocation by Landlord from time to time.
Shared Conference Facility:	That portion of the Building depicted as the “Shared Conference Facility” on Exhibit C attached hereto, subject to adjustment and relocation by Landlord from time to time.
Project:	The real property on which the Building is located, together with all improvements thereon and appurtenances thereto as described on Exhibit D .
Building:	That building located on the Project and commonly known and numbered as 215 First Street, Cambridge, Massachusetts.
Base Rent:	\$35,549.00 per month, subject to adjustments as set forth in <u>Section 3</u> below.
Rent Adjustment Percentage:	3%
Rentable Area of Premises:	Approximately 7,484 rentable square feet.
Rentable Area of Project:	Approximately 366,723 rentable square feet.
Tenant’s Share:	2.04%.
Tenant’s Percentage Share (Science Facility):	8.62%
Security Deposit:	\$106,647.00
Target Commencement Date:	April 1, 2015
Base Term:	Beginning on the Commencement Date and ending 60 months from the first day of the first full month commencing on or after the Commencement Date.
Permitted Use:	With respect to Suite 440, research and development laboratory, related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of <u>Section 6</u> hereof.

With respect to the Storage Area, the storage of flammable/solvent materials of Tenant in compliance with the provisions of Section 6 hereof and for no other use or purpose.

Address for Rent Payment:

P.O. Box 975383
Dallas, TX 75397-5383

Landlord's Notice Address:

385 East Colorado Boulevard, Suite 299
Pasadena, CA 91101
Attention: Corporate Secretary
Facsimile: 626-578-0770

Tenant's Notice Address:

215 First Street, Suite 440
Cambridge, MA 02142
Attention: Lease Administrator

1. Lease of Premises; Right to Use Common Areas; License to Shared Areas.

(a) **Lease of Premises; Common Areas.** Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project that are for the non-exclusive use of tenants of the Project (including but not limited to the restrooms, elevators, stairways, lobbies, corridors, walkways and Building entrances) are collectively referred to herein as the "**Common Areas**." Tenant shall have the non-exclusive right to use the Common Areas of the Project, excluding the Shared Science Facility and Shared Conference Facility to which Tenant's rights are as set forth in Section 1(b) below. Landlord reserves the right to modify, reconfigure and relocate the Common Areas, provided that such modifications, reconfigurations or relocations do not materially adversely affect Tenant's use of the Premises for the Permitted Use. Notwithstanding the foregoing, no interruption in Building Systems, services or Utilities, from any cause whatsoever, in connection with any work to effect any such modification, reconfiguration or relocation shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Landlord reserves the right to change the form of ownership of the Project or any part thereof. From and after the Commencement Date through the expiration of the Term, Tenant shall have access to the Building and the Premises 24 hours a day, 7 days a week, except in the case of emergencies, as the result of Legal Requirements, the performance by Landlord of any installation, maintenance or repairs, or any other temporary interruptions, and otherwise subject to the terms of this Lease.

(b) **Shared Science Facility; Shared Conference Facility.** Concurrently with the execution and delivery of this Lease by Tenant, Tenant shall execute and deliver to Landlord a license agreement in the form attached as **Exhibit E** attached hereto (the "**License Agreement**"). Tenant shall have the non-exclusive right to use the Shared Science Facility and Shared Conference Facility pursuant to the terms and conditions of the License Agreement. Tenant shall have no right to use or access the Shared Science Facility or Shared Conference Facility, except as provided in the License Agreement.

2. Delivery; Acceptance of Premises; Commencement Date. Landlord shall deliver ("**Delivery**" or "**Deliver**") the Premises to Tenant 1 business day after the mutual execution and delivery of this Lease by the parties and Tenant's delivery to Landlord of an insurance certificate evidencing the insurance required to be maintained by Tenant pursuant to Section 17 below.

The "**Commencement Date**" shall be the date that Landlord Delivers the Premises to Tenant. Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date and the expiration date of the Base Term when such are established in the form of the "Acknowledgement of Commencement Date" attached to this Lease as **Exhibit G**; provided, however, the failure of Landlord or Tenant to execute and deliver such acknowledgment shall not affect Landlord's or Tenant's rights hereunder. The "**Term**" of this Lease shall be the Base Term as defined above in the Basic Lease Provisions and the Extension Term which Tenant may elect pursuant to Section 35 hereof.

Except as set forth in this Lease: (i) Tenant shall accept the Premises in their condition as of the Commencement Date, subject to all applicable Legal Requirements (as defined in Section 7 hereof);

(ii) Landlord shall have no obligation for any defects in the Premises; and (iii) Tenant's taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises and that the Premises were in good condition at the time possession was taken. Any occupancy of the Premises by Tenant before the Commencement Date shall be subject to all of the terms and conditions of this Lease, including the obligation to pay Base Rent and Operating Expenses.

As of the Commencement Date, Landlord shall make available to Tenant a "**TI Allowance**" as follows: (a) a tenant improvement allowance of up to \$10.00 per rentable square foot of the Premises, or \$74,840 in the aggregate, which is included in Base Rent, and (b) an "**Additional Tenant Improvement Allowance**" in the maximum amount of \$10.00 per rentable square foot in the Premises, or \$74,840 in the aggregate, which shall, to the extent used, result in adjustments to the Base Rent as set forth in Section 3(c) below. The TI Allowance may be used solely for the design and construction of fixed and permanent improvements in the Premises desired by and performed by Tenant (the "**Tenant Improvements**"). Tenant acknowledges that upon the expiration of the Term of the Lease, the Tenant Improvements shall become the property of Landlord and may not be removed by Tenant. Except for the TI Allowance, Tenant shall be solely responsible for all of the costs of the Tenant Improvements. The Tenant Improvements shall be treated as Alterations and shall be undertaken pursuant to and in accordance with Section 10 of this Lease and shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the Building structure or Building Systems (as defined in Section 11) and shall not be otherwise unreasonably withheld, conditioned or delayed. Landlord and Tenant agree that the plans attached to this Lease as **Exhibit F** (the "**TI Plans**") have been approved by Landlord and Tenant and, to the extent that the Tenant Improvements performed by Tenant are substantially consistent with such plans, no further consent or approval from Landlord shall be required with respect thereto. The contractor for the Tenant Improvements shall be selected by Tenant, subject to Landlord's approval, which shall not be unreasonably withheld, conditioned or delayed. Landlord hereby approves of The Richmond Group as the general contractor of the Tenant Improvements. Prior to the commencement of the Tenant Improvements, Tenant shall deliver to Landlord a copy of any contract with Tenant's contractors (including the architect), and certificates of insurance from any contractor performing any part of the Tenant Improvements evidencing industry standard commercial general liability, automotive liability, "builder's risk", and workers' compensation insurance. Tenant shall cause the general contractor to provide a certificate of insurance naming Landlord, Alexandria Real Estate Equities, Inc., and Landlord's lender (if any) as additional insureds for the general contractor's liability coverages required above. During the course of design and construction of the Tenant Improvements, Landlord shall reimburse Tenant for the cost of the Tenant Improvements once a month against a draw request in Landlord's standard form, containing evidence of payment of the applicable costs and such certifications, lien waivers (including a conditional lien release for each progress payment and unconditional lien releases for the prior month's progress payments), inspection reports and other matters as Landlord customarily obtains, to the extent of Landlord's approval thereof for payment, no later than 30 days following receipt of such draw request. Upon completion of the Tenant Improvements (and prior to any final disbursement of the TI Allowance) Tenant shall deliver to Landlord the following items: (i) sworn statements setting forth the names of all contractors and subcontractors who did work on the Tenant Improvements and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans or marked-up construction drawings for the Tenant Improvements. Landlord shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Premises as part of the Tenant Improvements. Notwithstanding the foregoing, if the cost of the Tenant Improvements exceeds the TI Allowance, Tenant shall be required to pay such excess prior to the distribution of the then-remaining unpaid TI Allowance. The TI Allowance shall only be available for use by Tenant for the construction of the Tenant Improvements in the Premises until the date that is 12 months after the Commencement Date, and any portion of the TI Allowance which has not been requested for reimbursement by Tenant pursuant to the terms of this paragraph on or before the date that is 12 months after the Commencement Date shall be forfeited and shall not be available for use by Tenant.

For the period of 90 consecutive days after the Commencement Date, Landlord shall, at its sole cost and expense (which shall not constitute an Operating Expense), be responsible for any repairs that are required to be made to the Building or Building Systems, unless Tenant or any Tenant Party was responsible for the cause of such repair, in which case Tenant shall pay the cost.

Landlord and Tenant acknowledge and agree that, as of the Commencement Date, Landlord does hereby unconditionally, absolutely, and irrevocably grant, bargain, sell, transfer, assign, convey, set over and deliver unto Tenant on an “as-is” basis, without any representations or warranties, express or implied of any kind whatsoever by Landlord, all of Landlord’s right, title and interest in and to the furniture described on **Exhibit K** attached hereto.

Except as otherwise specifically set forth in this Lease, Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant’s business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein.

3. Base Rent.

(a) Base Rent for the first full month of the Base Term and the Security Deposit shall be due and payable on delivery of an executed copy of this Lease to Landlord. Tenant shall pay to Landlord in advance, equal monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office or address of Landlord for payment of Rent set forth above. Payments of Base Rent for any fractional calendar month shall be prorated. Except as expressly provided in Section 15 below, Tenant shall have no right at any time to abate, reduce, or set-off any Rent due hereunder. Base Rent shall be increased on each anniversary of the Commencement Date (each an “**Adjustment Date**”) by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as otherwise provided herein. Base Rent adjustments for any fractional calendar month shall be prorated.

(b) In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent (“**Additional Rent**”): (i) Tenant’s Share of Project Operating Expenses and Tenant’s Percentage Share (Science Facility) of Science Facility Operating Expenses (each as defined in Section 4), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period. Tenant’s obligation to pay Base Rent and Additional Rent hereunder is collectively referred to herein as “**Rent**”.

(c) Landlord shall, subject to the terms of Section 2, make available to Tenant the Additional Tenant Improvement Allowance. Commencing on the first day of the calendar month following Landlord’s first disbursement of the Additional Tenant Improvement Allowance, and continuing thereafter on the first day of each month during the Base Term, Tenant shall pay the amount necessary to fully amortize on a straight line basis the portion of the Additional Tenant Improvement Allowance actually funded by Landlord, if any, in equal monthly payments with interest at a rate of 8% per annum over the Base Term, which interest shall begin to accrue on the date that Landlord first disburses such Additional Tenant Improvement Allowance or any portion(s) thereof and shall only accrue on the amounts actually disbursed,. Any of the Additional Tenant Improvement Allowance and applicable interest remaining unpaid as of the expiration or earlier termination of the Lease shall be paid to Landlord in a lump sum at the expiration or earlier termination of this Lease.

4. Operating Expense Payments. Landlord shall deliver to Tenant a written estimate of Project Operating Expenses and Science Facility Operating Expenses for each calendar year during the

Term (together, the “**Annual Estimate**”), which may be revised by Landlord from time to time during such calendar year. Commencing on the Commencement Date and continuing thereafter on the first day of each month during the Term, Tenant shall pay Landlord an amount equal to 1/12th of Tenant’s Share of Project Operating Expenses and 1/12th of Tenant’s Percentage Share (Science Facility) of Science Facility Operating Expenses, each as shown on the Annual Estimate. Payments for any fractional calendar month shall be prorated. As used herein the term “**Operating Expenses**” shall mean collectively the Project Operating Expenses and the Science Facility Operating Expenses (as such terms are hereinafter defined); and the term “**Tenant’s Share of Operating Expenses**” shall mean collectively Tenant’s Share of Project Operating Expenses and Tenant’s Percentage Share (Science Facility) of Science Facility Operating Expenses.

The term “**Project Operating Expenses**” means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, Taxes (as defined below in this Section 4), transportation services (including costs associated with Landlord’s participation in the EZ-Ride shuttle or a successor shuttle service), capital repairs and replacements, and those capital improvements the purpose of which is to reduce Project Operating Expenses and/or to comply with Legal Requirements first made effective after the date of this Lease, which capital repairs, replacements and capital improvements are in each case amortized over the lesser of 7 years and the useful life of such capital items, and the costs of Landlord’s third party property manager or, if there is no third party property manager, administration rent in either case not to exceed 3.0% of Base Rent), excluding only:

- (a) the original construction costs of the Project and renovation prior to the date of the Lease and costs of correcting defects in such original construction or renovation;
- (b) capital expenditures for expansion of the Project or capital improvements that are not for the purpose of reducing Project Operating Expenses and/or complying with Legal Requirements first made effective after the date of this Lease;
- (c) interest, principal payments of Mortgage (as defined in Section 23) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured and all payments of base rent (but not taxes or operating expenses) under any ground lease or other underlying lease of all or any portion of the Project;
- (d) depreciation of the Project (except for those capital improvements, the cost of which are includable in Project Operating Expenses as provided above in this Section 4);
- (e) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;
- (f) legal and other expenses incurred in the negotiation or enforcement of leases;
- (g) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;
- (h) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;
- (i) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;

(j) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;

(k) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;

(l) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 6);

(m) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;

(n) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;

(o) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project;

(p) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;

(q) costs incurred in the sale or refinancing of the Project;

(r) net income taxes of Landlord or the owner of any interest in the Project, franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein;

(s) any expenses otherwise includable within Project Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project; and

(t) any costs incurred to remove, test or remediate Hazardous Materials in or about the Building or the Project (provided, however, that the foregoing is in no event intended to limit Tenant's obligations under Section 24 and Section 26 of this Lease).

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the actual totals of Project Operating Expenses, Science Facility Operating Expenses, Tenant's Share of Project Operating Expenses and Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, in each case for the previous calendar year, and (b) the total of Tenant's payments in respect of Project Operating Expenses and Science Facility Operating Expenses for such year. If Tenant's Share of actual Project Operating Expenses for such year exceeds Tenant's payments of Project Operating Expenses for such year, or if Tenant's Percentage Share (Science Facility) of actual Science Facility Operating Expenses for such year exceeds Tenant's payments of Science Facility Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Project Operating Expenses for such year exceed Tenant's Share of actual Project Operating Expenses for such year, or if

Tenant's payments of Science Facility Operating Expenses for such year exceed Tenant's Percentage Share (Science Facility) of actual Science Facility Operating Expenses for such year, Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 90 days after Tenant's receipt thereof, shall question or contest any item therein by giving written notice to Landlord, specifying each item questioned or contested and, if contested, the reason therefor. If, during such 90 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Project Operating Expenses or Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, Landlord will provide Tenant with access to Landlord's books and records in connection with the operation of the Project and such information in connection with the operation of the Project reasonably necessary to be responsive to Tenant's questions (the "**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Project Operating Expenses or Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, then Tenant shall have the right to have an independent regionally recognized accounting firm selected by Tenant, working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense) and approved by Landlord (which approval shall not be unreasonably withheld or delayed), audit and/or review the Expense Information for the year in question (the "**Independent Review**"). The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Project Operating Expenses for the calendar year in question exceeded Tenant's Share of Project Operating Expenses for such calendar year, or that the payments actually made by Tenant with respect to Science Facility Operating Expenses for the calendar year in question exceeded Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Project Operating Expenses for such calendar year were less than Tenant's Share of Project Operating Expenses for the calendar year, or that Tenant's payments with respect to Science Facility Operating Expenses for such calendar year were less than Tenant's Percentage Share (Science Facility) of Science Facility Operating Expenses, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Tenant's Share of Project Operating Expenses and Science Facility Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review.

Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall include Operating Expenses for whole calendar months in such calendar years and any partial calendar months shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Project is not at least 95% occupied on average during any year of the Term, for such year those expenses included in Tenant's Share of Project Operating Expenses that vary with the level of occupancy of the Building shall be computed as though the Project had been 95% occupied on average during such year.

"**Tenant's Share**" shall be the percentage set forth in the Basic Lease Provisions as Tenant's Share as reasonably adjusted by Landlord (upon no less than 30 days written notice to Tenant) for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase or decrease Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. "**Tenant's Percentage Share (Science Facility)**" means the percentage set forth in the Basic Lease Provisions, which Tenant's Percentage Share (Science Facility) shall be subject to further reasonable adjustment (upon no less than 30 days written notice to Tenant) for changes in the physical size of the Shared Science Facility or the Premises

occurring after the date of this Lease, and may be equitably increased or decreased for any item of expense or cost reimbursable that is specific to Tenant or that varies with occupancy or use or to address variations in occupancy or use of the Shared Science Facility among Tenant and other tenants. In the event that Tenant's Share is adjusted based on a remeasurement of the Premises as set forth above, Tenant's Percentage Share (Science Facility) shall be subject to a corresponding adjustment. "**Science Facility Operating Expenses**" means Landlord's determination of all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Shared Science Facility at the Project including, without duplication, water, sewer, electricity, gas and any other utilities serving such facilities, maintenance and repairs (including without limitation maintenance contracts) for such facilities and equipment therein, reasonable reserves consistent with good business practice for future repairs and replacements, capital repairs and replacements, and those capital improvements the purpose of which is to reduce Science Facility Operating Expenses and/or to comply with Legal Requirements first made effective after the date of this Lease, which capital repairs, replacements and capital improvements are in each case amortized over the lesser of 7 years and the useful life of such capital items, the contractor fees and expenses and/or salaries, wages, benefits and other compensation paid to any personnel as may be assigned in whole or in part to such facilities, and any Taxes assessed by a Governmental Authority (as defined below) with a valuation allocated to the Shared Science Facility in the Project, but excluding the same kinds of exclusions enumerating in clauses (a) through (u) above with respect to Project Operating Expenses. For purposes of clarification, the parties agree that those specific expense items actually included in Science Facility Operating Expenses in a year shall not also be included as Project Operating Expenses in the same year.

Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises, the Shared Science Facility, or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises, the Shared Science Facility, or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by, any Governmental Authority, or (v) imposed as a license or other fee, charge, tax or assessment on Landlord's business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. Taxes shall not include any net income taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder, nor franchise, conveyance or excise taxes. Project Operating Expenses hereunder shall also include the cost of tax monitoring services provided to Landlord with respect to the Project. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand. If Landlord shall receive any abatement or refund of Taxes that does not derive from any vacancy in the Building or rent losses and such abatement or refund is for a time period for which Tenant has made payments during the Term, then out of any balance remaining after deducting Landlord's reasonable expenses incurred in obtaining such refund or abatement, Landlord shall, at Landlord's option, either (i) credit the excess amount determined by Landlord to be attributable to the Premises to the next succeeding installments of estimated Taxes or (ii) pay the excess amount determined by Landlord to be attributable to the Premises to Tenant within 30

days after delivery of the Annual Statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay such excess amount determined by Landlord to be attributable to the Premises to Tenant after deducting all other amounts due Landlord. Nothing contained in this Lease shall obligate Landlord to seek a refund or abatement of Taxes.

5. Security Deposit. Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit (the “**Security Deposit**”) for the performance of all of Tenant’s obligations hereunder in the amount set forth in the Basic Lease Provisions, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the “**Letter of Credit**”): (i) in form and substance reasonably satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution reasonably satisfactory to Landlord, and (v) redeemable by presentation of a sight draft (which may be presented by delivery by overnight courier) at the financial institution’s offices in the United States. With respect to any Letter of Credit given as a Security Deposit hereunder, if Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant’s obligations under this Lease. The Security Deposit does not constitute an advance rental deposit or a measure of Landlord’s damages in case of Tenant’s default. Upon each occurrence of a Default (as defined in Section 16), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Tenant hereby waives the provisions of any law, now or hereafter in force, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon any such use of all or any portion of the Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord’s option, to the last assignee of Tenant’s interest hereunder) within 90 days after the expiration or earlier termination of this Lease.

6. Use. The Premises shall be used solely for the Permitted Use set forth in the Basic Lease Provisions and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, “**ADA**”) (collectively, “**Legal Requirements**” and each, a “**Legal Requirement**”). Tenant shall, upon 5 days’ written notice from Landlord, discontinue any use of the Premises which is declared by any Governmental Authority having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant’s or Landlord’s insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Landlord acknowledges that the use that Tenant has disclosed to Landlord that Tenant will be making of the Premises as of the Commencement Date will not result in the voidance of or an increased insurance risk with respect to the insurance currently being maintained by Landlord. Tenant shall not permit any part of the Premises to be used as a “place of public accommodation”, as defined in the ADA or any similar legal requirement. Tenant shall reimburse Landlord promptly upon demand (and delivery to Tenant of reasonable evidence thereof) for any additional premium charged for any such insurance policy by reason of Tenant’s failure to comply with the provisions of this Section or otherwise caused by Tenant’s use and/or occupancy of the Premises. Tenant will not commit or permit waste, overload the floor or structure of the Premises, subject

the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment weighing 750 pounds or more in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, Landlord has reviewed the equipment plans and structural assessment attached hereto as **Exhibit L** ("**Equipment Plans**") and hereby consents to Tenant's installation of equipment as shown therein. If and to the extent that the Equipment Plans change, Landlord may require a new structural assessment and any such changes shall be subject to Landlord's further consent as required under this Section. Tenant shall not, without the prior written consent of Landlord, use the Premises in any manner which will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use.

Landlord shall be responsible for the compliance of the Common Areas of the Project with the Legal Requirements as of the Commencement Date. Following the Commencement Date, Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located) and at Tenant's expense (to the extent such Legal Requirement is triggered by reason of Tenant's, as compared to other tenants of the Project, specific use of the Premises or Tenant's alterations) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements. Tenant, at its sole expense, shall make any alterations or modifications to the interior of the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA) related to Tenant's use or occupancy of the Premises. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "**Claims**") arising out of or in connection with Legal Requirements related to Tenant's use or occupancy of the Premises, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all such Claims.

7. Holding Over. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to 150% of Rent in effect during the last 30 days of the Term, and (B) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over, including consequential damages, but otherwise excluding any special, punitive or exemplary damages. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.

8. Parking. Subject to all matters of record, Force Majeure, a casualty or Taking (as defined in [Section 15](#) below) and the exercise by Landlord of its rights hereunder, Landlord shall make available to Tenant and Tenant shall lease from Landlord, at then-current market rates from time to time, 7 parking spaces in a parking lot or garage at an offsite location within a 10-minute walk of the Building, all of such parking spaces to be on a non-reserved basis. As of the Commencement Date, such parking spaces shall be located in the parking garage serving the 303 3rd Square Apartments. Parking spaces may, at Landlord's discretion, become available for use during the Term in the parking garage serving 50-60 Binney. As of the Commencement Date, the market parking rate for the parking spaces is \$250 per parking space per month. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including without limitation other tenants of the Project. Landlord shall have the right, exercisable by notice to Tenant given at any time during the Term, to relocate all or a portion of the parking spaces made available to Tenant hereunder to another location within a 10-minute walk of the Building.

9. Utilities, Services.

(a) Landlord shall provide, subject to the terms of this Section 9, water, electricity, heat, air conditioning, light, power, sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services), and, for the office portion of the Premises only, refuse and trash collection and janitorial services (collectively, “**Utilities**”). Landlord shall pay, as Operating Expenses or subject to Tenant’s reimbursement obligation, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. Electricity serving the Premises will be separately submetered. Landlord may cause, at Landlord’s expense, any Utilities to be separately metered or charged directly to Tenant by the provider. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services which may be furnished to Tenant or the Premises during the Term. Tenant shall pay, as part of Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. No interruption or failure of Utilities, from any cause whatsoever, shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

Notwithstanding anything to the contrary set forth herein, if (i) a stoppage of an Essential Service (as defined below) to the Premises shall occur and such stoppage is due solely to the gross negligence or willful misconduct of Landlord and not due in any part to any act or omission on the part of Tenant or any Tenant Party or any matter beyond Landlord’s reasonable control (any such stoppage of an Essential Service being hereinafter referred to as a “**Service Interruption**”), and (ii) such Service Interruption continues for more than 5 consecutive business days after Landlord shall have received written notice thereof from Tenant, and (iii) as a result of such Service Interruption, the conduct of Tenant’s normal operations in the Premises are materially and adversely affected, then, there shall be an abatement of one day’s Base Rent for each day during which such Service Interruption continues after such 5 business day period; provided, however, that if any part of the Premises is reasonably useable for Tenant’s normal business operations or if Tenant conducts all or any part of its operations in any portion of the Premises notwithstanding such Service Interruption, then the amount of each daily abatement of Base Rent shall only be proportionate to the nature and extent of the interruption of Tenant’s normal operations or ability to use the Premises. The rights granted to Tenant under this paragraph shall be Tenant’s sole and exclusive remedy resulting from a failure of Landlord to provide services, and Landlord shall not otherwise be liable for any loss or damage suffered or sustained by Tenant resulting from any failure or cessation of services. For purposes hereof, the term “**Essential Services**” shall mean the following services: HVAC service, water, sewer and electricity, but in each case only to the extent that Landlord has an obligation to provide same to Tenant under this Lease.

(b) Tenant shall provide janitorial services and trash collection for the Premises, and Landlord shall provide as an Operating Expense a dumpster and/or compactor at the loading dock for use by Tenant in common with others entitled thereto for the disposal of non-hazardous and non-controlled substances and material.

(c) Tenant may use the freight elevator and loading dock in common with others entitled thereto at no additional charge. The regular hours of operation of the freight elevator and loading dock are 24 hours per day, 7 days per week, subject to downtime for maintenance and repairs.

(d) Landlord’s sole obligation for providing standby generators or any other standby power equipment, systems, furnishings or personal property, whether or not affixed to the Building (collectively, the “**Equipment**”) shall be (i) to provide such Equipment as is determined by Landlord in its sole and absolute discretion, and (ii) to contract with a third party (determined by Landlord to be qualified) to maintain the Equipment that is deemed by Landlord (in its reasonable professional discretion) to need periodic maintenance per the manufacturer’s standard maintenance guidelines. Notwithstanding anything to the contrary contained herein, Landlord shall, at least once per month as part of the maintenance of the Building, run the emergency generator for a period reasonably determined by Landlord for the purpose of

determining whether it operates when started. Landlord shall have no obligation to provide Tenant with operational Equipment, back-up Equipment or back-up utilities or to supervise, oversee or confirm that the third party maintaining the Equipment is maintaining the Equipment as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair or maintenance of the Equipment when such Equipment is not operational, including any delays thereto due to the inability to obtain parts or replacements, Landlord shall have no obligation to provide Tenant with alternative or back-up Equipment or alternative sources of utilities. Tenant expressly acknowledges and agrees that Landlord does not guaranty that the Equipment will be operational at all times, will function or perform adequately, or that emergency power will be available to the Premises when needed, and Landlord shall not be liable for any damages resulting from the failure of such Equipment. Tenant hereby releases Landlord from and against any and all claims arising directly or indirectly out of or relating to the Equipment, or the existence, use of failure thereof. The terms of this Section 9(d) shall survive the expiration or earlier termination of this Lease.

10. Alterations; Tenant's Property. Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant (not including the Tenant Improvements performed by Tenant pursuant to Section 2), including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems (as defined in Section 11(a) below) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems, but which shall otherwise not be unreasonably withheld or delayed. Tenant may construct nonstructural Alterations in the Premises without Landlord's prior approval if the aggregate cost of all such work in any 12 month period does not exceed \$50,000 (a "**Notice-Only Alteration**"), provided Tenant notifies Landlord in writing of such intended Notice-Only Alteration, and such notice shall be accompanied by plans, specifications (to the extent that the nature of the Notice-Only Alterations is such that plans and specifications would typically be obtained), work contracts and such other information concerning the nature and cost of the Notice-Only Alteration as may be reasonably requested by Landlord, which notice and accompanying materials shall be delivered to Landlord not less than 15 business days in advance of any proposed construction. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Tenant agrees to take such steps as may be required, or as otherwise directed by Landlord, with respect to contractors and subcontractors performing any Alterations to ensure that no labor disruption, strikes, pickets, protests or other similar labor actions occur on or about the Premises in connection with the performance of work on any Alterations. Any request for approval of Alterations shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the Alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, within 10 days after demand Landlord's reasonable out-of-pocket expenses for plan review, coordination, scheduling and supervision in connection with any Alterations. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other

coverage in amounts and from an insurance company reasonable satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver (or cause to be delivered) to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

Other than (i) the items, if any, listed on **Exhibit H** attached hereto, (ii) any items agreed by Landlord in writing to be included on **Exhibit H** in the future, and (iii) any trade fixtures, machinery, equipment and other personal property not installed by Landlord or its contractor which may be removed without material damage to the Premises, which damage shall be repaired (including capping or terminating utility hook-ups behind walls) by Tenant during the Term (collectively, "**Tenant's Property**"), all property of any kind paid for by Landlord, Alterations, real property fixtures, built-in machinery and equipment, built-in casework and cabinets and other similar additions and improvements built into the Premises so as to become an integral part of the Premises, such as fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch (collectively, "**Installations**") shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term and shall remain upon and be surrendered with the Premises as a part thereof in accordance with Section 24 following the expiration or earlier termination of this Lease; provided, however, that Landlord shall, at the time its approval of such Installation is requested, or at the time it receives notice of a Notice-Only Alteration, notify Tenant if it has elected to cause Tenant to remove such Installation upon the expiration or earlier termination of this Lease. If Landlord so elects, Tenant shall remove such Installation upon the expiration or earlier termination of this Lease and restore any damage caused by or occasioned as a result of such removal, including, when removing any of Tenant's Property which was plumbed, wired or otherwise connected to any of the Building's plumbing, electrical or other Building Systems, capping off all such connections behind the walls of the Premises and repairing any holes. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant. Notwithstanding anything to the contrary contained herein, any biosafety cabinets installed in the Premises and paid for by Tenant shall be the property of Tenant and may be removed by Tenant at the expiration of the Term, provided that Tenant restores any damage caused by or occasioned as a result of Tenant's removal of such biosafety cabinets.

Notwithstanding anything to the contrary contained in this Lease, Tenant shall be required prior to the expiration or earlier termination of the Term, at Tenant's sole cost and expense, to remove the Tenant Improvements and restore the Premises to its condition prior to the installation of the Tenant Improvements (the "**Premises Restoration**"). If, as of the expiration or earlier termination of the Term, Tenant has not removed the Tenant Improvements and completed the Premises Restoration as required hereunder, Landlord may undertake the removal of the Tenant Improvements and the Premises Restoration, and Tenant shall pay to Landlord, within 10 days after written demand by Landlord, the costs incurred by Landlord with respect to such removal of the Tenant Improvements and Premises Restoration.

11. Repairs.

(a) **Landlord's Repairs.** Landlord, as an Operating Expense, shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including HVAC, plumbing, fire sprinklers, elevators and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (individually, a "**Tenant Party**" and collectively, "**Tenant Parties**") excluded. Landlord shall repair losses and damages caused by Tenant or any Tenant Party at Tenant's sole cost and expense. Such maintenance and repairs by Landlord under this Section shall include Landlord's making such replacements as Landlord may deem necessary in its sole discretion. Landlord reserves the right to stop building system services when necessary. Landlord shall have no responsibility or liability for failure to

supply Building System services during any such period of interruption; provided, however, that Landlord shall make a commercially reasonable effort to give Tenant 24 hours advance notice of any planned stoppage of Building System services for routine maintenance, repairs, alterations or improvements. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 15.

(b) **Tenant's Repairs.** Subject to Section 11(a) and Section 15 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition, damage covered by Section 15 excepted, all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Section 15, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

12. **Liens.** Tenant shall discharge, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant 10 days after Tenant receives notice of the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or creditor of Tenant will upon its face or by exhibit thereto indicate that such Financing Statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

13. **Indemnification.** Tenant hereby indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all claims for injury or death to persons or damage to property (i) occurring within the Premises and arising directly or indirectly out of use or occupancy of the Premises, unless caused solely by the willful misconduct or negligence of Landlord, (ii) occurring outside of the Premises (including without limitation in the Shared Science Facility or Shared Conference Facility) and arising directly or indirectly out of an act or failure of Tenant to take any action required of Tenant whether under this Lease or otherwise, or (iii) arising directly or indirectly out of or a breach or default by Tenant in the performance of any of its obligations hereunder or under the License Agreement. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises or any part of the Project). Tenant further waives any and all claims for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party.

14. **Insurance.** Landlord shall, as an Operating Expense, maintain such insurance covering the Project as Landlord shall reasonably determine. Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with such limits as required by law; and commercial general liability insurance, with a minimum limit of not less than \$2,000,000 per occurrence for bodily injury and property damage with respect to the Premises, Shared Science Facility and Shared Conference Facility. The commercial general liability insurance policy shall name Landlord, its officers, directors, employees, managers, members, agents, invitees and contractors (individually, a "**Landlord Party**" and collectively, "**Landlord Parties**") and Alexandria Real Estate Equities, Inc., as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Tenant shall (i) provide Landlord with 30 days advance written notice of cancellation of such commercial general liability policy, and (ii) request Tenant's insurer to endeavor to provide 30 days advance written notice to Landlord of cancellation of such commercial general liability policy (or 10 days in the event of a cancellation due to non-payment of premium). Copies of such policies (if requested by Landlord), or certificates of insurance showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant upon commencement of the Term and upon each renewal of said insurance. Tenant's policy may be a "blanket policy" with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 days prior to the expiration of such policies, furnish Landlord with renewal certificates.

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof and any servicer in connection therewith, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, members, agents, invitees and contractors ("**Related Parties**"), in connection with any loss or damage thereby insured against. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

15. **Condemnation and Casualty.** If at any time during the Term the Premises, Common Areas or Project is in whole or in part (i) materially damaged or destroyed by a fire or other casualty, or (ii) taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a "**Taking**"), then this Lease shall, at the written election of Landlord delivered to Tenant within sixty (60) days following such casualty or taking, terminate as of the date of such damage, destruction or Taking. If at any time during the Term the Premises or Common Areas are in whole or in part (x) materially damaged or destroyed by a fire or other casualty, or

(y) subject to a Taking, then this Lease shall, at the written election of Tenant delivered to Landlord within sixty (60) days following such casualty or taking, terminate as of the date of such damage, destruction or Taking. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises and Common Areas (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 26) in, on or about the Premises or Common Areas (collectively referred to herein as “**Hazardous Materials Clearances**”).

If neither Tenant nor Landlord elect to terminate this Lease pursuant to the immediately preceding paragraph, Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises or Common Areas are repaired and restored, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant’s business. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 15, Tenant waives any right to terminate the Lease by reason of damage or casualty loss, provided that, if Landlord shall fail to restore the Premises or Common Areas within 12 months after the receipt of any Hazardous Materials Clearances determined by Landlord to be required (or if Landlord determines that no Hazardous Materials Clearances are required, within 12 months of the end of the 60-day period referred to in the first and second sentences of the immediately preceding paragraph), Tenant shall have a further right to terminate this Lease by written notice to Landlord delivered within 60 days after the expiration of such 12-month period, provided further, that if Landlord completes such restoration within 30 days after receipt of Tenant’s termination notice, such termination notice shall be void and this Lease shall continue in full force and effect.

The provisions of this Lease, including this Section 15, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 15 sets forth their entire understanding and agreement with respect to such matters. Upon any fire or other casualty or Taking, Landlord shall be entitled to receive the entire proceeds of the insurance maintained by Landlord and the entire price or award from any such Taking without, in either case, any payment to Tenant, and Tenant hereby assigns to Landlord Tenant’s interest, if any, in such proceeds or award, except that Tenant shall have the right, to the extent that same shall not diminish Landlord’s award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant’s trade fixtures, if a separate award for such items is made to Tenant.

16. **Events of Default.** Each of the following events shall be a default (“**Default**”) by Tenant under this Lease:

(a) **Payment Defaults.** Tenant shall fail to pay any installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent within 5 business days of any such notice not more than once in any 12 month period.

(b) **Insurance.** Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration of the current coverage.

(c) **Improper Transfer.** Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as may be expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(d) **Liens.** Tenant shall fail to discharge or otherwise obtain the release of any lien upon the Premises in violation of this Lease within 10 days after any such lien is filed against the Premises.

(e) **Insolvency Events.** Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(f) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 19 or 23 within 5 days after a second notice requesting such document.

(g) **Default under License.** Tenant shall be in default or breach of any of its obligations under the License beyond any cure period as may be expressly set forth in the License.

(h) **Other Defaults.** Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 16, and, except as otherwise expressly provided herein, such failure shall continue for a period of 30 days after written notice thereof from Landlord to Tenant, provided that if the nature of such default is such that it cannot be cured by the payment of money and reasonably requires more than 30 days to cure, then Tenant shall not be deemed to be in Default if Tenant commences such cure within 30 days of the aforesaid notice from Landlord and thereafter diligently prosecutes such cure to completion within 90 days of the aforesaid notice from Landlord. Any notice given under this Section 16(h) shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice.

17. Landlord's Remedies.

(a) **Payment By Landlord; Interest.** Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act that is the subject of the Default. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law (the "**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) **Late Payment Rent.** Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum of 6% of the overdue Rent as a late charge. Notwithstanding the foregoing, before assessing a late charge the first time in any calendar year, Landlord shall provide Tenant written notice of the delinquency and will

waive the right if Tenant pays such delinquency within 5 business days thereafter. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.

(c) **Other Remedies.** Upon and during the continuance of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever. No cure in whole or in part of such Default by Tenant after Landlord has taken any action beyond giving Tenant notice of such Default to pursue any remedy provided for herein (including retaining counsel to file an action or otherwise pursue any remedies) shall in any way affect Landlord's right to pursue such remedy or any other remedy provided Landlord herein or under law or in equity, unless Landlord, in its sole discretion, elects to waive such Default.

This Lease and the Term and estate hereby granted are subject to the limitation that whenever a Default shall have happened and be continuing, Landlord shall have the right, at its election, then or thereafter while any such Default shall continue and notwithstanding the fact that Landlord may have some other remedy hereunder or at law or in equity, to give Tenant written notice of Landlord's intention to terminate this Lease on a date specified in such notice, which date shall be not less than 5 days after the giving of such notice, and upon the date so specified, this Lease and the estate hereby granted shall expire and terminate with the same force and effect as if the date specified in such notice were the date hereinbefore fixed for the expiration of this Lease, and all rights of Tenant hereunder shall expire and terminate, and Tenant shall be liable as hereinafter in this Section 17(c) provided. If any such notice is given, Landlord shall have, on such date so specified, the right of re-entry and possession of the Premises and the right to remove all persons and property therefrom and to store such property in a warehouse or elsewhere at the risk and expense, and for the account, of Tenant. Should Landlord elect to re-enter as herein provided or should Landlord take possession pursuant to legal proceedings or pursuant to any notice provided for by law, Landlord may from time to time re-let the Premises or any part thereof for such term or terms and at such rental or rentals and upon such terms and conditions as Landlord may deem advisable, with the right to make commercially reasonable alterations in and repairs to the Premises.

(i) In the event of any termination of this Lease as in this Section 17 provided or as required or permitted by law or in equity, Tenant shall forthwith quit and surrender the Premises to Landlord, and Landlord may, without further notice, enter upon, re-enter, possess and repossess the same by summary proceedings, ejectment or otherwise, and again have, repossess and enjoy the same as if this Lease had not been made, and in any such event Tenant and no person claiming through or under Tenant by virtue of any law or an order of any court shall be entitled to possession or to remain in possession of the Premises. Landlord, at its option, notwithstanding any other provision of this Lease, shall be entitled to recover from Tenant, as and for liquidated damages, the sum of;

(A) all Base Rent, Additional Rent and other amounts payable by Tenant hereunder then due or accrued and unpaid: and

(B) the amount equal to the aggregate of all unpaid Base Rent and Additional Rent which would have been payable if this Lease had not been terminated prior to the end of the Term then in effect, discounted to its then present value in accordance with accepted financial practice using a rate of 5% per annum, for loss of the bargain; and

(C) all other damages and expenses (including attorneys' fees and expenses), if any, which Landlord shall have sustained by reason of the breach of any provision of this Lease; less

(D) the net proceeds of any re-letting actually received by Landlord and the amount of damages which Tenant proves could have been avoided had Landlord taken reasonable steps to mitigate its damages.

(ii) Nothing herein contained shall limit or prejudice the right of Landlord, in any bankruptcy or insolvency proceeding, to prove for and obtain as liquidated damages by reason of such termination an amount equal to the maximum allowed by any bankruptcy or insolvency proceedings, or to prove for and obtain as liquidated damages by reason of such termination, an amount equal to the maximum allowed by any statute or rule of law whether such amount shall be greater or less than the excess referred to above.

(iii) Nothing in this Section 17 shall be deemed to affect the right of either party to indemnifications pursuant to this Lease.

(iv) If Landlord terminates this Lease upon the occurrence of a Default, Tenant will quit and surrender the Premises to Landlord or its agents, and Landlord may, without further notice, enter upon, re-enter and repossess the Premises by summary proceedings, ejectment or otherwise. The words "enter", "re-enter", and "re-entry" are not restricted to their technical legal meanings.

(v) If either party shall be in default in the observance or performance of any provision of this Lease, and an action shall be brought for the enforcement thereof in which it shall be determined that such party was in default, the party in default shall pay to the other all fees, costs and other expenses which may become payable as a result thereof or in connection therewith, including attorneys' fees and expenses.

(vi) If Tenant shall default in the keeping, observance or performance of any covenant, agreement, term, provision or condition herein contained, Landlord, without thereby waiving such default, may perform the same for the account and at the expense of Tenant (a) immediately or at any time thereafter and without notice in the case of emergency or in case such default will result in a violation of any legal or insurance requirements, or in the imposition of any lien against all or any portion of the Premises, and (b) in any other case if such default continues after any applicable cure period provided in Section 16. All reasonable costs and expenses incurred by Landlord in connection with any such performance by it for the account of Tenant and also all reasonable costs and expenses, including attorneys' fees and disbursements incurred by Landlord in any action or proceeding (including any summary dispossess proceeding) brought by Landlord to enforce any obligation of Tenant under this Lease and/or right of Landlord in or to the Premises, shall be paid by Tenant to Landlord within 10 days after demand.

(vii) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in Section 26(c), at Tenant's expense.

(viii) In the event that Tenant is in breach or Default under this Lease, whether or not Landlord exercises its right to terminate or any other remedy, Tenant shall reimburse Landlord upon demand for any costs and expenses that Landlord may incur in connection with any such breach or Default, as provided in this Section 17(c). Such costs shall include legal fees and costs incurred for the negotiation of a settlement, enforcement of rights or otherwise. Tenant shall also indemnify Landlord against and hold Landlord harmless from all costs, expenses, demands and liability, including without limitation, legal fees and costs Landlord shall incur if Landlord shall become or be made a party to any claim or action instituted by Tenant against any third party, or by or against any person holding any interest under or using the Premises by license of or agreement with Tenant.

(d) Except as otherwise provided in this Section 17, no right or remedy herein conferred upon or reserved to Landlord is intended to be exclusive of any other right or remedy, and every right and

remedy shall be cumulative and in addition to any other legal or equitable right or remedy given hereunder, or now or hereafter existing. No waiver of any provision of this Lease shall be deemed to have been made unless expressly so made in writing. Landlord shall be entitled, to the extent permitted by law, to seek injunctive relief in case of the violation, or attempted or threatened violation, of any provision of this Lease, or to seek a decree compelling observance or performance of any provision of this Lease, or to seek any other legal or equitable remedy.

18. Assignment and Subletting.

(a) **General Prohibition.** Without Landlord's prior written consent subject to and on the conditions described in this Section 18, Tenant shall not, voluntarily or by operation of law, directly assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises. For the avoidance of doubt, any public offering of shares or other ownership interest in Tenant or any private equity financing by one or more investors who regularly invest in private biotechnology companies for which Tenant has given Landlord prior written notice, shall not be deemed an assignment. Such prior written notice shall be treated by Landlord as confidential information.

(b) **Permitted Transfers.** If Tenant desires to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises other than pursuant to a Permitted Assignment (as defined below), then at least 15 business days, but not more than 90 business days, before the date Tenant desires the assignment or sublease to be effective (the "**Assignment Date**"), Tenant shall give Landlord a notice (the "**Assignment Notice**") containing such information about the proposed assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, (ii) refuse such consent, in its reasonable discretion; or (iii) terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an "**Assignment Termination**"). Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (1) the proposed assignee or subtenant is a governmental agency; (2) in Landlord's reasonable judgment, the use of the Premises by the proposed assignee or subtenant would entail any alterations that would lessen the value of the leasehold improvements in the Premises, or would require increased services by Landlord; (3) in Landlord's reasonable judgment, the proposed assignee or subtenant is engaged in areas of scientific research or other business concerns that are controversial; (4) in Landlord's reasonable judgment, the proposed assignee or subtenant lacks the creditworthiness to support the financial obligations it will incur under the proposed assignment or sublease; (5) in Landlord's reasonable judgment, the character, reputation, or business of the proposed assignee or subtenant is inconsistent with the desired tenant-mix or the quality of other tenancies in the Project or is inconsistent with the type and quality of the nature of the Building; (6) Landlord has received from any prior landlord to the proposed assignee or subtenant a negative report concerning such prior landlord's experience with the proposed assignee or subtenant; (7) Landlord has experienced previous defaults by or is in litigation with the proposed assignee or subtenant; (8) the use of the Premises by the proposed assignee or subtenant will violate any applicable Legal Requirement; (9) the proposed assignee or subtenant is an entity with whom Landlord is then negotiating to lease space in the Project; or (10) the assignment or sublease is prohibited by Landlord's lender. If Landlord delivers notice of its election to exercise an Assignment Termination, Tenant shall have the right to withdraw such Assignment Notice by written notice to Landlord of such election within 5 business days after Landlord's notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord's consent to

the proposed assignment, sublease or other transfer. Tenant shall pay to Landlord a fee equal to One Thousand Five Hundred Dollars (\$1,500) in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents. Notwithstanding the foregoing, Landlord's consent to an assignment of this Lease or a subletting of any portion of the Premises to any entity controlling, controlled by or under common control with Tenant (a "**Permitted Assignment**") shall not be required, provided that Landlord shall have the right to approve the form of any such sublease or assignment, which approval shall not be unreasonably withheld, conditioned or delayed. In addition, Tenant shall have the right to assign this Lease, upon not less than 30 days prior written notice to Landlord but without obtaining Landlord's prior written consent, to a corporation or other entity which is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership interests of Tenant provided that (i) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring the Lease, and (ii) the net worth (as determined in accordance with generally accepted accounting principles ("**GAAP**")) of the assignee is not less than the greater of the net worth (as determined in accordance with GAAP) of Tenant as of (A) the Commencement Date, or (B) as of the date of Tenant's most current quarterly or annual financial statements, and (iii) such assignee shall agree in writing to assume all of the terms, covenants and conditions of this Lease arising after the effective date of the assignment (a "**Corporate Permitted Assignment**"). Control Permitted Assignments and Corporate Permitted Assignments are hereinafter referred to as "**Permitted Assignments**."

(c) **Additional Conditions.** As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in Default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under the Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) A list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) **No Release of Tenant, Sharing of Excess Rents.** Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the sum of the rental payable under this Lease (excluding however, any Rent payable under this Section) and actual and reasonable brokerage fees, legal costs and any design or construction fees directly related to and required pursuant to the terms

of any such sublease (“**Excess Rent**”), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant’s obligations under this Lease, all rent from any such subletting, and Landlord as assignee and as attorney-in-fact for Tenant, or a receiver for Tenant appointed on Landlord’s application, may collect such rent and apply it toward Tenant’s obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.

(e) **No Waiver.** The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under the Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 18, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party’s action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

19. **Estoppel Certificate.** Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver an estoppel certificate on any form reasonably requested by a proposed lender or purchaser.

20. **Quiet Enjoyment.** So long as Tenant shall perform all of the covenants and agreements herein required to be performed by Tenant, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

21. **Prorations.** All prorations required or permitted to be made hereunder shall be made on the basis of a 360-day year and 30-day months.

22. **Rules and Regulations.** Tenant shall, at all times during the Term, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project. The current rules and regulations are attached hereto as **Exhibit I**. If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

23. **Subordination.** This Lease and Tenant’s interest and rights hereunder are and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity of any further instrument or act on the part of Tenant. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees within 10 business days after demand to execute,

acknowledge and deliver such instruments confirming such subordination and/or attornment as shall be requested by any such Holder. Upon request of Tenant, Landlord shall use commercially reasonable efforts to obtain from any future Holder of a Mortgage on the Project, if any, an agreement of non-disturbance, which agreement may also contain provisions for subordination, attornment and other terms and conditions of Holder. The term “**Mortgage**” whenever used in this Lease shall be deemed to include deeds of trust, security assignments, ground leases or other superior leases and any other encumbrances, and any reference to the “**Holder**” of a Mortgage shall be deemed to include the beneficiary under a deed of trust.

24. **Surrender.** Upon the expiration of the Term or earlier termination of Tenant’s right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to any Alterations or Installations permitted by Landlord or required to remain in the Premises in accordance with Section 10, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than Landlord or any Landlord Party (collectively, “**Tenant HazMat Operations**”) and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Section 15 excepted. At least 3 months prior to the surrender of the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the “**Surrender Plan**”). Such Surrender Plan shall be accompanied by a listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord’s environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant’s expense as set forth below, to cause Landlord’s environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of the Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of-pocket expense incurred by Landlord for Landlord’s environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed \$2,500. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord’s environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 24.

Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord’s election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant’s Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant’s expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord’s retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the

Term, including the obligations of Tenant under Section 26 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

25. Waiver of Jury Trial. TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS RELATED HERETO.

26. Environmental Requirements.

(a) **Prohibition/Compliance/Indemnity.** Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises, Shared Science Facility or any other part of the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or Shared Science Facility by anyone other than Landlord or any Landlord Party otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord and each of the Landlord Parties harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys' fees, consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "**Environmental Claims**") which arise during or after the Term as a result of such breach by Tenant of its obligations stated in the preceding sentence or as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Shared Science Facility, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Shared Science Facility, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Shared Science Facility, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises, the Shared Science Facility or the Project. Notwithstanding anything to the contrary contained in this Section 26(a), Tenant shall not be responsible for the clean-up or remediation of, and the indemnification and hold harmless obligation set forth in this paragraph shall not apply to (i) contamination on the Project or in the Premises that Tenant can demonstrate was present on the Project or in the Premises prior to the date of this Lease, (ii) the presence of any Hazardous Materials in the Premises which Tenant can demonstrate migrated from outside of the Premises into the Premises; (iii) the presence of any Hazardous Materials in the Premises caused by Landlord or any Landlord's employees, agents and contractors, or (iv) in the case of contamination in the Shared Science Facility or Shared Conference Facility, the presence of which Tenant can demonstrate, was not caused by an act or omission of Tenant, except in any case to the extent Tenant and/or any of the Tenant Parties have exacerbated or contributed to such contamination, and provided that it is understood that Tenant shall

have the burden of proof with respect to whether such contamination was present on the Project or in the Premises prior to the date of this Lease or whether such contamination in the Shared Science Facility or Shared Conference Facility was not caused by an act or omission of Tenant.

(b) **Business.** As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord, prior to the Commencement Date, a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("**Hazardous Materials List**"). Tenant shall deliver to Landlord true and correct copies of the following documents (the "**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date (or if unavailable at that time, concurrent with the receipt from or submission to a Governmental Authority): permits; approvals; reports and correspondence; storage and management plans; and notices of violations of any Legal Requirements. Tenant hereby represents and warrants to Landlord that (i) Tenant has not been required by any prior landlord or governmental authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question; and (ii) Tenant is not subject to an enforcement order issued by any governmental authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials. If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion. Tenant shall be permitted, however, to redact any portions(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(c) **Landlord's Tests.** Landlord shall have access to, and a right to perform inspections and tests of, the Premises and the Shared Science Facility to determine Tenant's compliance with Environmental Requirements, its obligations under this Section 26, or the environmental condition of the Premises, the Shared Science Facility or the Project. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises and Shared Science Facility by Tenant or any Tenant Party. Access to the Premises shall be granted to Landlord upon Landlord's prior notice to Tenant and at such times so as to minimize, so far as may be reasonable under the circumstances, any disturbance to Tenant's operations. Such inspections and tests shall be conducted at Landlord's expense, unless such inspections or tests reveal that Tenant has not complied with any Environmental Requirement, in which case Tenant shall reimburse Landlord for the reasonable cost of such inspection and tests. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions for which Tenant is responsible pursuant to this Section 26 and that are identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights that Landlord may have against Tenant.

(d) **Tenant's Obligations.** Tenant's obligations under this Section 26 shall survive the expiration or earlier termination of the Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials for which Tenant is responsible under this Lease (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(e) **Definitions.** As used herein, the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including

without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term “**Hazardous Materials**” means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the “**operator**” of Tenant’s “**facility**” and the “**owner**” of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

(f) **Asbestos.**

(i) **Notification of Asbestos.** Landlord hereby notifies Tenant of the presence of asbestos-containing materials (“**ACMs**”) and/or presumed asbestos-containing materials (“**PACMs**”) within or about the Premises in the locations identified in **Exhibit J** attached hereto.

(ii) **Tenant Acknowledgement.** Tenant hereby acknowledges receipt of the notification in paragraph (i) of this Section 26 and understand that the purpose of such notification is to make Tenant, and any agents, employees, and contractors of Tenant, aware of the presence of ACMs and/or PACMs within or about the Building in order to avoid or minimize any damage to or disturbance of such ACMs and/or PACMs.

/s/ EDS
Tenant’s Initials

(iii) **Acknowledgement from Contractors/Employees.** Tenant shall give Landlord at least 14 days’ prior written notice before conducting, authorizing or permitting any of the activities listed below within or about the Premises, and before soliciting bids from any person to perform such services. Such notice shall identify or describe the proposed scope, location, date and time of such activities and the name, address and telephone number of each person who may be conducting such activities. Thereafter, Tenant shall grant Landlord reasonable access to the Premises to determine whether any ACMs or PACMs will be disturbed in connection with such activities. Tenant shall not solicit bids from any person for the performance of such activities without Landlord’s prior written approval (such approval not to be unreasonably withheld). Upon Landlord’s request, Tenant shall deliver to Landlord a copy of a signed acknowledgement from any contractor, agent, or employee of Tenant acknowledging receipt of information describing the presence of ACMs and/or PACMs within or about the Premises in the locations identified in **Exhibit J** prior to the commencement of such activities. Nothing in this Section 26 shall be deemed to expand Tenant’s rights under the Lease or otherwise to conduct, authorize or permit any such activities.

- (A) Removal of thermal system insulation (“**TSI**”) and surfacing ACMs and PACMs (i.e., sprayed-on or troweled-on material, e.g., textured ceiling paint or fireproofing material);
- (B) Removal of ACMs or PACMs that are not TSI or surfacing ACMs or PACMs; or
- (C) Repair and maintenance of operations that are likely to disturb ACMs or PACMs.

27. **Tenant’s Remedies/Limitation of Liability.** Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from

Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary), provided, however, that if the nature of Landlord's obligation arises from an emergency condition and Tenant provides notice to Landlord (which may be telephonic if followed by written notice on the same day describing the emergency condition in reasonable detail, including without limitation the emergency nature of the condition and specifying in all capital letters and boldface type that the condition is an emergency and response is required by Landlord pursuant to the Lease), then Landlord shall respond within a reasonable period after receipt of such notice of the emergency condition. Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

28. **Inspection and Access.** Subject to the next sentence, Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time upon not less than 2 business days' advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time), to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease, to perform such environmental tests as may be reasonably required to confirm Tenant's compliance with the terms hereof and for any other business purpose. Landlord and Landlord's representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants or for any other business purpose. Landlord shall use reasonable efforts to minimize interference with Tenant's operations in the Premises in connection with Landlord's activities conducted pursuant to this paragraph.

29. **Security.** Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises, Shared Science Facility, Shared Conference Facility or Common Areas. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises, Shared Science Facility, Shared Conference Facility or Common Areas or any other breach of security with respect to the Premises, Shared Science Facility, Shared Conference Facility, Common Areas or other portion of the Project. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

30. **Brokers.** Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no Broker brought about this transaction, other than Cushman & Wakefield. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than the broker, if any named in this Section 30, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

31. **Limitation on Landlord's Liability.** NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF

EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LANDLORD OR ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS IN CONNECTION WITH THIS LEASE NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

32. **Severability.** If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby.

33. **Signs; Exterior Appearance.** Tenant shall not: (i) attach anything at any time to any outside wall of the Project, (ii) use any window coverings or sunscreen other than Landlord's standard window coverings, (iii) place any articles on the window sills, (iv) place any items on any exterior balcony, or (v) paint, affix or exhibit any signs or any kind in the Premises which can be viewed from the exterior of the Premises. Interior signs on doors and the directory tablet, in each case in Building standard form, shall be provided by Landlord at Landlord's sole cost and expense.

34. **Early Termination Right.** Tenant shall have the right, subject to the provisions of this Section 34, to terminate this Lease ("**Termination Right**") with respect to the entire Premises only as of March 31, 2018 ("**Early Termination Date**"), so long as Tenant delivers to Landlord (i) a written notice ("**Termination Notice**"), of its election to exercise its Termination Right no less than 12 months in advance of the Early Termination Date, and (ii) concurrent with Tenant's delivery of the Termination Notice to Landlord, the unamortized amount of any outstanding Additional Tenant Improvement Allowance with interest as provided in Section 3(c) above (the "**Early Termination Payment**"). If Tenant timely and properly exercises the Termination Right, Tenant shall vacate the Premises and deliver possession thereof to Landlord in the condition required by the terms of this Lease on or before the Early Termination Date and Tenant shall have no further obligations under this Lease except for those accruing prior to the Early Termination Date and those which, pursuant to the terms of this Lease, survive the expiration or early termination of this Lease. If Tenant does not deliver to Landlord the Termination Notice and the Early Termination Payment within the time period provided in this paragraph, Tenant shall be deemed to have waived its Termination Right and the provisions of this Section 34 shall have no further force or effect.

35. **Right to Extend Term.** Tenant shall have the right to extend the Term of the Lease upon the following terms and conditions:

(a) **Extension Right.** Tenant shall have one right (the "**Extension Right**") to extend the term of this Lease for 5 years (the "**Extension Term**") on the same terms and conditions as this Lease (other than Base Rent) by giving Landlord written notice of its election to exercise the Extension Right at least 12 months prior to the expiration of the original Term of the Lease.

Upon the commencement of the Extension Term, Base Rent shall be payable at the Market Rate (as defined below). Base Rent shall thereafter be adjusted on each annual anniversary of the commencement of such Extension Term by a percentage as determined by Landlord and agreed to by Tenant at the time the Market Rate is determined. As used herein, "**Market Rate**" shall mean the then market rental rate for combined laboratory and office space in Kendall Square area of East Cambridge of comparable age, quality, level of finish and proximity to amenities and public transit, which shall in no event be less than the Base Rent payable as of the date immediately preceding the commencement of the Extension Term. The Market Rate shall initially be determined by Landlord and submitted to Tenant for its consideration.

If, on or before the date which is 270 days prior to the expiration of the Base Term of this Lease, Tenant has not agreed with Landlord's determination of the Market Rate and the rent escalations during the Extension Term after negotiating in good faith, Tenant shall be deemed to have elected arbitration as described in Section 35(b). Tenant acknowledges and agrees that, if Tenant has elected to exercise the Extension Right by delivering notice to Landlord as required in this Section 35(a), Tenant shall have no right thereafter to rescind or elect not to extend the term of the Lease for the Extension Term.

(b) **Arbitration.** Within 10 days of Tenant's notice to Landlord of its election (or deemed election) to arbitrate Market Rate and escalations, each party shall deliver to the other a proposal containing the Market Rate and escalations that the submitting party believes to be correct ("**Extension Proposal**"). If either party fails to timely submit an Extension Proposal, the other party's submitted proposal shall determine the Base Rent and escalations for the Extension Term. If both parties submit Extension Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Extension Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Rate and escalations. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall determine the Base Rent for the Extension Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.

The decision of the Arbitrator(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate and escalations are not determined by the first day of the Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the Extension Term and increased by the Rent Adjustment Percentage until such determination is made. After the determination of the Market Rate and escalations, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Rate and escalations for the Extension Term.

An "**Arbitrator**" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech or life sciences space in the greater Boston metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years of experience representing landlords and/or tenants in the leasing of improved office and high tech or life sciences space in the greater Boston metropolitan area, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested.

(c) **Rights Personal.** The Extension Right is personal to Tenant (and successors pursuant to a Permitted Assignment) and not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease.

(d) **Exceptions.** Notwithstanding anything set forth above to the contrary, the Extension Right shall, at Landlord's option, not be in effect and Tenant may not exercise the Extension Right:

(i) during any period of time that Tenant is in Default under any provision of this Lease; or

(ii) if Tenant has been in Default under any provision of this Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, whether or not the Defaults are cured.

(iii) if Tenant (including any successor pursuant to one or more Permitted Assignment(s)) is not in occupancy of at least 75% of the entire Premises demised hereunder both at the time of the exercise of the Extension Right and at the time of the commencement date of the Extension Term.

(e) **No Extensions.** The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.

(f) **Termination.** The Extension Right shall, at Landlord's option, terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such Defaults are cured.

36. Miscellaneous.

(a) **Notices.** Except as otherwise provided herein, all notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, confirmed receipt by facsimile, or upon delivery if delivered by reputable overnight guaranty courier or certified mail return receipt requested, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Recordation.** Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease.

(c) **Interpretation.** The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(d) **Not Binding Until Executed.** The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(e) **Limitations on Interest.** It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in

connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(f) **Choice of Law.** Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(g) **Time.** Time is of the essence as to the performance of Tenant's obligations under this Lease.

(h) **Force Majeure.** Except for the payment of Rent, neither Landlord nor Tenant shall be held responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond their reasonable control (individually or collectively, "**Force Majeure**"), it being understood that Force Majeure shall not include financial difficulties of Landlord, if any.

(i) **Financial Information.** Tenant shall furnish Landlord with true and complete copies of (i) Tenant's most recent audited annual financial statements within 90 days of the end of each of Tenant's fiscal years during the Term, (ii) Tenant's most recent unaudited quarterly financial statements within 45 days of the end of each of Tenant's first three fiscal quarters of each of Tenant's fiscal years during the Term, (iii) corporate brochures and/or profiles prepared by Tenant for prospective investors, and (iv) any other financial information or summaries that Tenant typically provides to its lenders or shareholders (other than any forward-looking or predictive information). So long as Tenant is a "public company" and its financial information is publicly available, then the foregoing delivery requirements of this Section 37(i) shall not apply. Notwithstanding the foregoing, in no event shall Tenant be required to provide any financial information to Landlord which Tenant does not otherwise prepare (or cause to be prepared) for its own purposes.

(j) **OFAC.** Tenant, and all beneficial owners of Tenant, are currently (a) in compliance with, and shall at all times during the Term of this Lease remain in compliance with, the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the Term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

(k) **Incorporation by Reference.** All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control, except in the case of conflict between the Rules and Regulations in **Exhibit I**. In the event of any conflict between the Rules and Regulations in **Exhibit I** and the Lease, the Lease shall control.

(l) **Entire Agreement.** This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, letters of intent, negotiations and

discussions, whether oral or written, of the parties, and there are no warranties, representations or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein.

(m) **No Accord and Satisfaction.** No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.

(n) **Hazardous Activities.** Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

[Signatures on next page]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

TENANT:

SERES HEALTH, INC.,
a Delaware corporation

By: /s/ Eric Shaff

Its: CFO

LANDLORD:

ARE-MA REGION NO. 38, LLC, a Delaware limited liability company

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, member

By: ARE-QRS Corp., a Maryland corporation, general partner

By: /s/ Eric Johnson

Its: Eric S. Johnson

Vice President

Real Estate Legal Affairs

EXHIBIT A TO LEASE

DESCRIPTION OR PLAN OF PREMISES

Linskey Way

2nd Street

-Premises

ALEXANDRIA
ARCHITECTS & PLANNERS, INC.
11100 Lees Ferry Road, Alexandria, VA 22304
703-836-1100

210 WEST STREET
ALEXANDRIA, VA

FROM THE FEDERAL BUREAU OF SURVEY

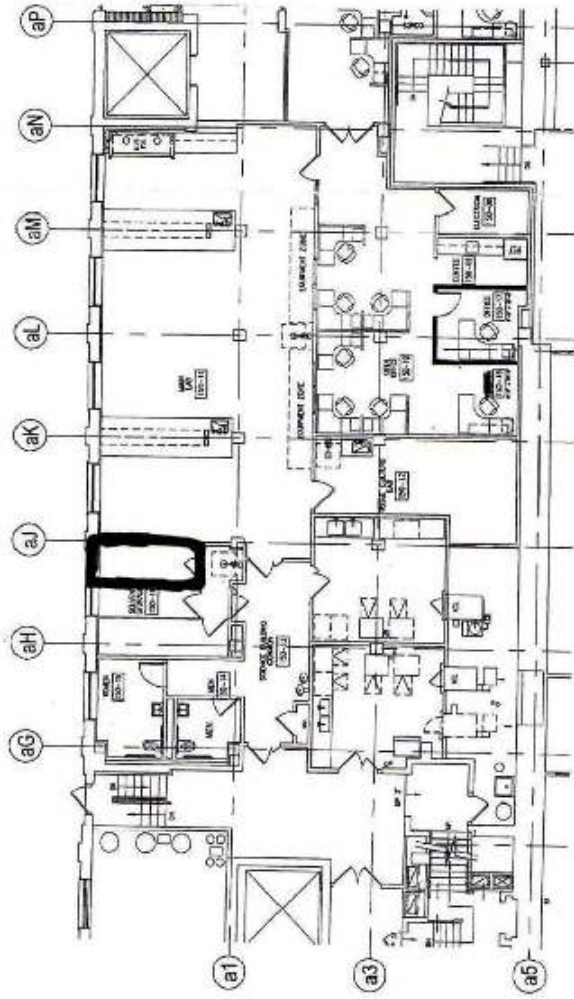
SCALE: 1/8" = 1'-0"

DATE: 10/1/88

BY: [Signature]

EC-1

Linskey Way



2nd Street

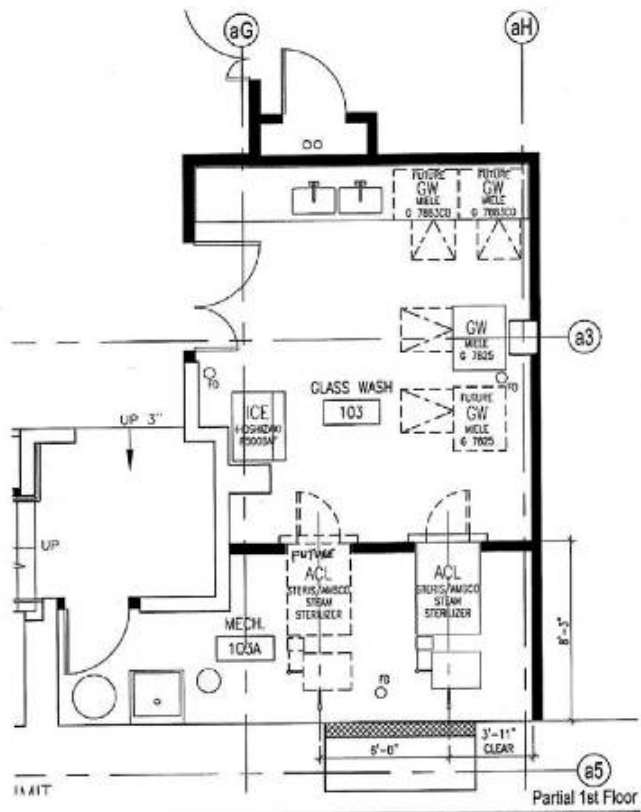
FIRST FLOOR
215 FIRST STREET
CAMBRIDGE,
MASSACHUSETTS

SHEET 1111 FIRST FLOOR

□ - Solvent Storage Cage Space

EXHIBIT B TO LEASE

DESCRIPTION OR PLAN OF SHARED SCIENCE FACILITY

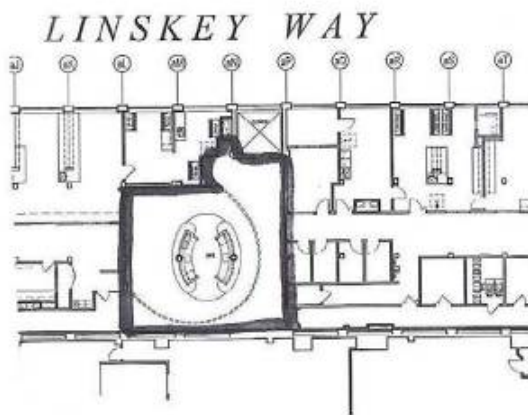


ALEXANDRIA



ALEXANDRIA REAL ESTATE EQUITIES, INC.
780 TECHNOLOGY SQUARE
CAMBRIDGE, MA 02139

10/17



ROOM	NO.	AREA	REMARKS

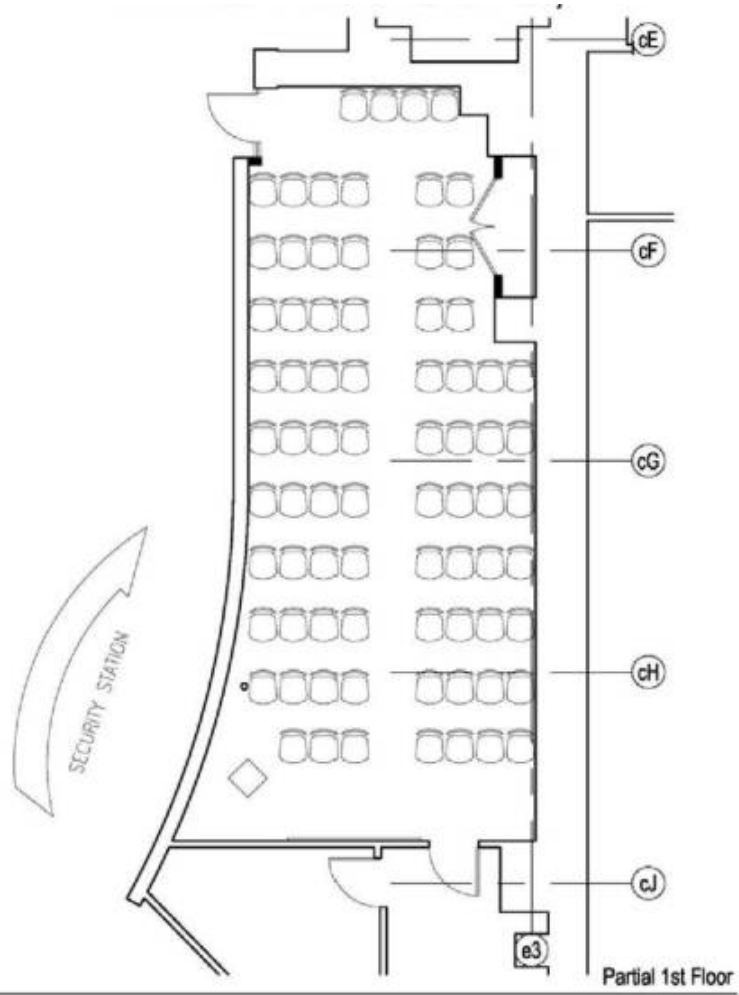
PROJECT NO: 14217.11
PROJECT NAME: FOURTH FLOOR PLAN

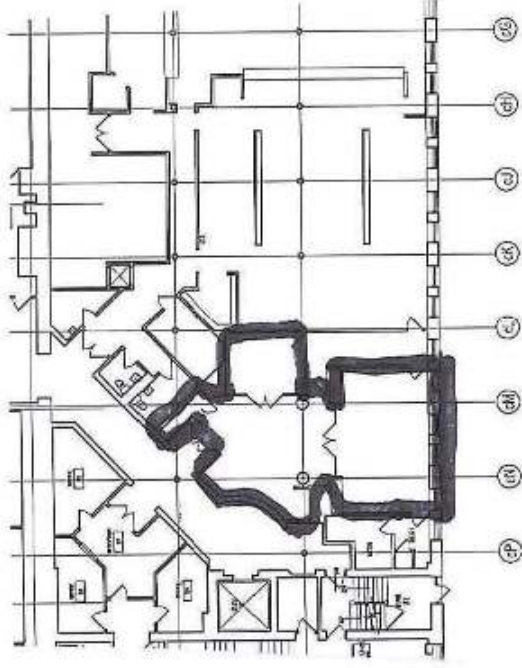
219 FIRST STREET
CAMBRIDGE,
MASSACHUSETTS

 - Shared Science Facility Kitchen area

EXHIBIT C TO LEASE

DESCRIPTION OR PLAN OF SHARED CONFERENCE FACILITY





ATHENAEUM STREET

FIRST FLOOR



- Shared Conference Facility

EXHIBIT D TO LEASE

DESCRIPTION OF PROJECT

A certain parcel of land with the buildings thereon, in Cambridge, Middlesex County, Massachusetts, known as and numbered 215 First Street, and bounded and described as follows:

Beginning at the northwest corner of Athenaeum Street and First Street, said point being the southeasterly corner of the parcel;

Thence running N 80 degrees 12'27" W, a distance of 399.30 feet along the northerly line of said Athenaeum Street;

Thence turning and running N 09 degrees 43'10" E, a distance of 200.00 feet along the easterly line of Second Street;

Thence turning and running S 80 degrees 12'27" E, a distance of 399.41 feet along the southerly line of Munroe Street;

Thence turning and running S 09 degrees 45'06" W, a distance of 200.00 feet along the westerly line of First Street to the point of beginning.

The above described parcel contains 79,871 square feet, more or less.

EXHIBIT E TO LEASE

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (this “**Agreement**”), dated as of _____, 2015, is made and entered into by and between **ARE-MA REGION NO. 38, LLC**, a Delaware limited liability company (“**Licensor**”), and **SERES HEALTH, INC.**, a Delaware corporation (“**Licensee**”), with reference to the following Recitals:

RECITALS

A. Licensor is the owner of that certain property commonly known as 215 First Street, Cambridge, Massachusetts (the “**Property**”).

B. Concurrently herewith, Licensee and Licensor are entering into that certain Lease Agreement (the “**Lease**”) for certain space located at the Property and more particularly described therein (the “**Premises**”). All initially capitalized terms used herein but not otherwise defined shall have the respective meanings ascribed thereto in the Lease.

C. Licensee desires to have, and Licensor desires to grant to Licensee, certain rights to access and use a certain area of the Property described as the “**Shared Science Facility**” on **Exhibit 1** attached hereto and a certain area of the Property described as the “**Shared Conference Facility**” on **Exhibit 2** attached hereto, all in accordance with the terms and provisions set forth below.

AGREEMENT

For and in consideration of the covenants and premises herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. License; Scheduling and Fees for Shared Conference Facility.

(a) **License.** Licensor hereby grants Licensee, and Licensee hereby accepts, a non-exclusive license to use the Shared Science Facility and the Shared Conference Facility subject to the terms and provisions of this Agreement.

(b) **Scheduling and Fees for Shared Conference Facility.** Use by Licensee of the Shared Conference Facility shall be in common with others entitled to use the Shared Conference Facility in accordance with scheduling procedures reasonably determined by Licensor. Licensor shall use commercially reasonable efforts to schedule users on a first-come, first-served basis, but Licensor reserves the right to exercise its discretion in the event of conflicting scheduling requests among users. The first two occasions in a calendar month that Licensee uses the Shared Conference Facility shall be at no charge for such use, and thereafter Licensee shall pay the hourly charges established by Licensor from time to time for use of the Shared Conference Facility. The current hourly charge for the use of the Shared Conference Facility as of the date of this Lease is \$200 per hour and is subject to change as determined by Licensor from time to time. Payment of such hourly charges shall be made within 20 days of invoice therefor, and Licensor reserves the right to require an advance deposit from time to time.

2. Use. Licensee shall exercise its limited rights hereunder in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Property, Shared Science Facility or Shared Conference Facility and the use and occupancy thereof, including the rules and regulations attached as **Exhibit 3** hereto, as the same may be revised by Licensor from time to time.

3. **Term.** The term of this Agreement shall commence on the Commencement Date set forth in the Lease (the “**Commencement Date**”) and continue until the earlier to occur of (a) the last day on which Licensee is entitled to occupy the Premises pursuant to the terms of the Lease, (b) the date this Agreement is sooner terminated pursuant to its terms, and (c) the date the Lease is sooner terminated pursuant to its terms. The period between the Commencement Date and the date of termination of this Agreement shall be the “**Term**.”

4. **Relocation and Modification of Shared Science Facility or Shared Conference Facility.** Licensor shall have the right at any time to reconfigure, relocate or modify the Shared Science Facility and/or Shared Conference Facility from time to time and to revise or expand any of the services (if any) provided therein; provided, however, that such reconfiguration, relocation or modification of the respective facility or any revision or expansion of services shall not materially adversely affect Tenant’s use of such facility or service as permitted pursuant to this Agreement.

5. **Interference.** Licensee shall use the Shared Science Facility and Shared Conference Facility in a manner that will not interfere with the rights of any tenants, other licensees or Licensor’s service providers. Licensor assumes no responsibility for enforcing Licensee’s rights or for protecting the Shared Science Facility or Shared Conference Facility from interference or use from any person, including, without limitation, tenants or other licensees of the Property.

6. **Default by Licensee.**

(a) It is mutually agreed that Licensee shall be in default hereunder (“**Default**”),

(i) if Licensee fails to comply with any of the terms or provisions of this Agreement, and fails to cure such default within 30 days after the date of delivery of written notice of default from Licensor, provided that if the nature of such default is such that it cannot be cured by the payment of money and reasonably requires more than 30 days to cure, then Licensee shall not be deemed to be in Default under this License if Licensee commences such cure within 30 days of the aforesaid notice from Licensor and thereafter diligently prosecutes such cure to completion within 90 days of the aforesaid notice from Licensor; or

(ii) with respect to the Shared Conference Facility, if Licensee fails to pay any fees or charges for use of the Shared Conference Facility or other amounts required hereunder when due pursuant to this Agreement; provided, however, that Licensor will give Licensee notice and an opportunity to cure any failure to pay such fees or charges within 3 business days of any such notice not more than once in any 12 month period and Licensee agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law or

(iii) during the occurrence and continuation of any Default (as defined in the Lease) under the Lease.

(b) In the event of any Default by Licensee hereunder, Licensor shall be entitled to all rights and remedies provided for Landlord under the Lease, and all other rights and remedies provided at law or in equity, including without limitation, termination of this Agreement and the license granted hereunder.

7. **Indemnification and Limitation of Liability.**

(a) Licensor’s sole obligation for providing standby generators or any other standby power equipment, other equipment, systems, furnishings or personal property to the Shared Science Facility or Shared Conference Facility, whether or not affixed to the Building (collectively, “**Equipment**”) shall be (i) to provide such Equipment as is determined by Licensor in its sole and absolute discretion, and (ii) to contract with a third party (determined by Licensor to be qualified) to maintain the Equipment that is deemed by Licensor (in its reasonable professional discretion) to need periodic maintenance per the manufacturer’s standard maintenance guidelines. Licensor shall have no obligation to provide Licensee with operational Equipment, back-up Equipment or back-up utilities or to supervise, oversee or confirm

that the third party maintaining the Equipment is maintaining the Equipment as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair or maintenance of the Equipment when such Equipment is not operational, including any delays thereto due to the inability to obtain parts or replacements, Licensor shall have no obligation to provide Licensee with alternative or back-up Equipment or alternative sources of utilities. Licensee expressly acknowledges and agrees that Licensor does not guaranty that the Equipment will be operational at all times, will function or perform adequately, or that emergency power will be available to the Premises when needed, and Licensor shall not be liable for any damages resulting from the failure of such Equipment. Licensee hereby releases Licensor from and against any and all claims arising directly or indirectly out of or relating to the Equipment, or the existence, use of failure thereof, unless caused solely by the willful misconduct or gross negligence of Licensor. The terms and provisions of this Section 7(a) shall survive the expiration or earlier termination of this Agreement.

(b) NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LICENSOR AND LICENSEE TO THE CONTRARY: (i) LICENSOR SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER PERSON FOR (AND LICENSEE AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION, TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; and (ii) THERE SHALL BE NO PERSONAL RECOURSE TO LICENSOR FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES, SHARED SCIENCE FACILITY, SHARED CONFERENCE FACILITY OR PROJECT OR ARISING IN ANY WAY UNDER THIS LICENSE AGREEMENT OR ANY OTHER AGREEMENT BETWEEN LICENSOR AND LICENSEE WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LICENSOR HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LICENSOR'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LICENSOR'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (iii) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LICENSOR OR ANY OF ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS IN CONNECTION WITH THIS LICENSE AGREEMENT NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LICENSOR OR ANY OF LICENSOR'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS.

(c) Licensee acknowledges and agrees that there are no warranties of any kind, whether express or implied, made by Licensor or otherwise with respect to the Shared Science Facility, Shared Conference Facility or any services (if any) provided in either the Shared Science Facility or Shared Conference Facility, and Licensee disclaims any and all such warranties.

(d) Licensor shall not be in default hereunder unless Licensor fails to perform any of its obligations hereunder within thirty (30) days after written notice from Licensee specifying such failure, with such extension of time by reason of Force Majeure as may be reasonably necessary; provided, however, that if the nature of Licensor's obligation arises from an emergency condition and Licensee provides notice to Licensor (which may be telephonic if followed by written notice on the same day describing the emergency condition in reasonable detail, including without limitation the emergency nature of the condition and specifying in all capital letters and boldface type that the condition is an emergency and response is required by Licensor pursuant to this Agreement), then Licensor shall respond within a reasonable period after receipt of such notice of the emergency condition. Licensee's sole remedy for any breach or default by Licensor hereunder shall be to terminate this Agreement and Licensee hereby, to the maximum extent possible, knowingly waives the provisions of any law or regulation, now or hereafter in effect which provides additional or other remedies to Licensee as a result of any breach by Licensor hereunder or under any such law or regulation.

8. Miscellaneous.

(a) This Agreement, together with the Lease, constitutes the entire agreement and understanding between the parties, and supersedes all offers, negotiations and other agreements concerning the subject matter contained herein. Any amendments to this Agreement must be in writing and executed by both parties.

(b) If any clause or provision of this Agreement is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Agreement shall not be affected thereby.

(c) This Agreement shall be binding on and inure to the benefit of the successors and permitted assigns of the respective parties.

(d) All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth in the Lease (as the same may be revised from time to time in accordance with the terms of the Lease).

(e) The license granted hereunder is appurtenant to Licensee's leasehold interest in the Premises and may not be assigned or otherwise pledged or transferred, directly or indirectly, except in connection with any assignment of the Lease or sublease of the Premises to which Landlord consents or is otherwise permitted under the Lease. In the event of a permitted assignment of the Lease, this Agreement shall automatically be assigned thereby, and thereupon the assigning Licensee shall have no further rights to use or access the Shared Science Facility or Shared Conference Facility. No assignment or other transfer of the Lease or of this License shall release Licensee of its obligations hereunder.

(f) This Agreement shall be construed, interpreted, governed and enforced pursuant to the laws of the state in which the Property is located.

(g) This Agreement may be executed in multiple counterparts but all counterparts taken together shall constitute a single document.

(h) Time is of the essence of each and every provision of this Agreement.

(i) The parties to this Agreement hereby acknowledge that each such party and its counsel have participated in the negotiation and preparation of this Agreement, and this Agreement shall be construed and interpreted without regard to any presumption or other rule requiring construction against the party causing the Agreement to be drafted.

(j) Licensee acknowledges that its use of the Shared Science Facility and Shared Conference Facility are non-exclusive and will be subject to the use of other tenants and licensees of the Property. Licensee acknowledges that it will be important for all such users to cooperate with each other to maintain the confidentiality of each party's documents and operations as well as information a party may hold under confidential arrangements with third parties. Licensee shall maintain and treat as confidential and secret all information and materials which may intentionally or unintentionally be disclosed to it in connection with such shared occupancy (the "**Confidential Information**"). Licensee shall not disclose Confidential Information to any third party and will take appropriate action by instruction, agreement or otherwise with its employees, agents, affiliates, associates, representatives, contractors and invitees to ensure that security of the Confidential Information is maintained. Notwithstanding the foregoing, Licensee may disclose Confidential Information to the extent that (a) disclosure is compelled by judicial or administrative process or other requirements of law, or (b) Licensee can show that such Confidential Information (i) was publicly available prior to the date of this Agreement or thereafter became publicly available without violation of this Agreement by Licensee or its employees, agents, affiliates, associates, representatives, contractors or invitees, or (ii) became available to Licensee by means other

than its use of or access to the Shared Science Facility or Shared Conference Facility. The provisions of this Section 8(j) shall survive the expiration or earlier termination of this Agreement.

[Signatures On Next Page]

IN WITNESS WHEREOF, Licensor and Licensee have caused this Agreement to be executed by their duly authorized representatives as of the date first above written.

LICENSEE:

SERES HEALTH, INC.,
a Delaware corporation

By: /s/ Eric Shaff

Its: CFO

LICENSOR:

ARE-MA REGION NO. 38, LLC, a Delaware limited liability company

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, member

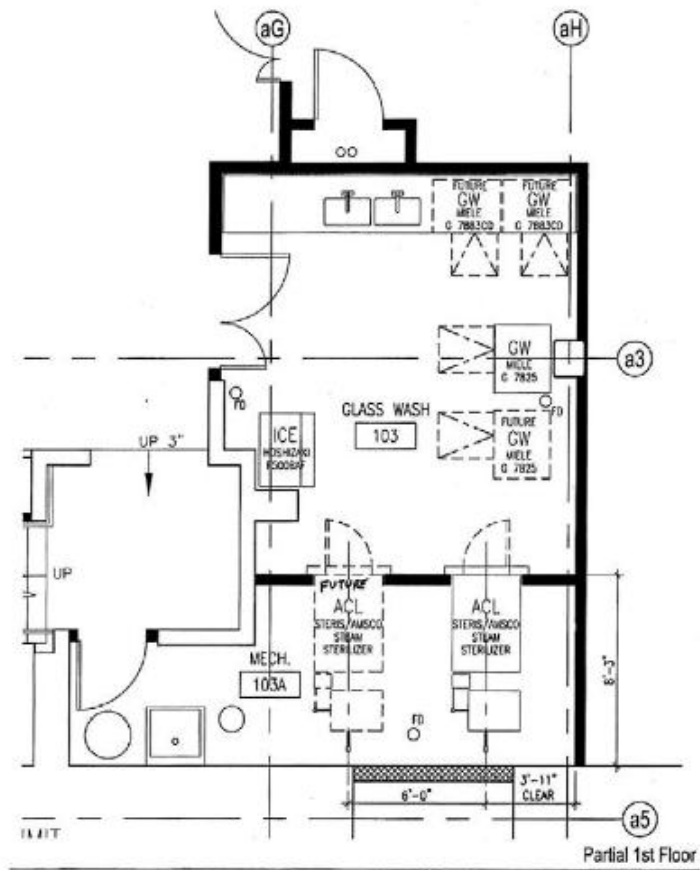
By: ARE-QRS Corp., a Maryland corporation, general partner

By: /s/ Eric Johnson

Its: Eric Johnson
Senior Vice President
RE Legal Affairs

EXHIBIT 1 TO LICENSE AGREEMENT

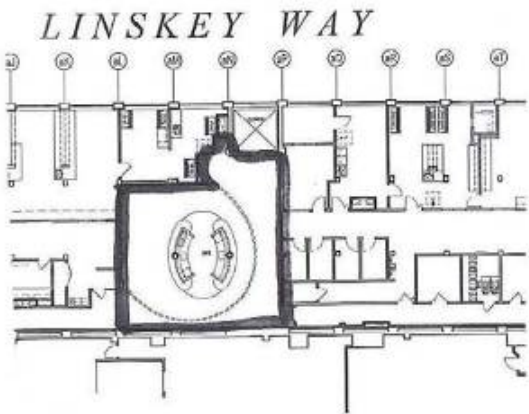
DESCRIPTION OR PLAN OF SHARED SCIENCE FACILITY





ALEXANDRIA REAL ESTATE EQUITIES, INC.
780 TECHNOLOGY SQUARE
CAMBRIDGE, MA 02139

DATE



ROOM	NO.	AREA	REMARKS

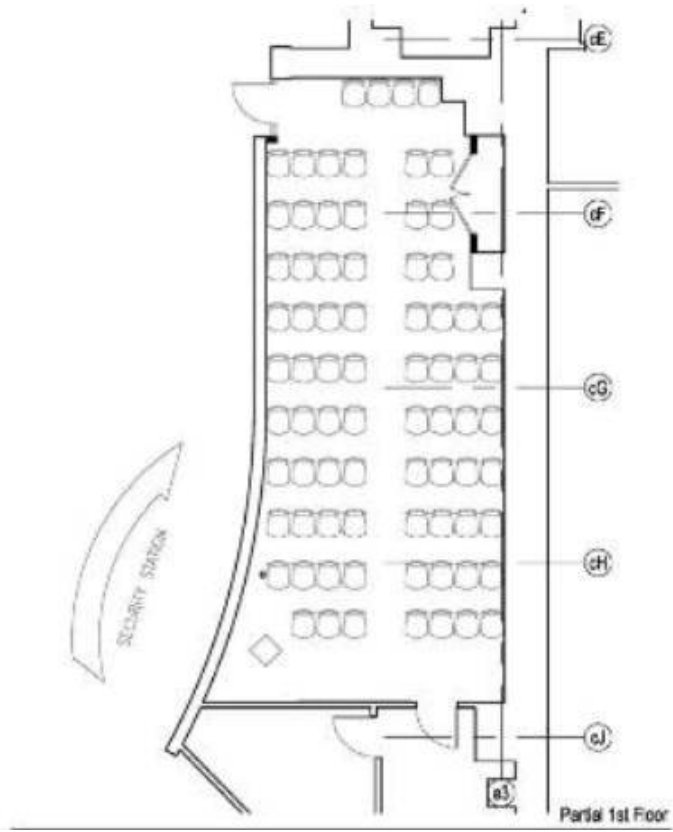
PROJECT NO. 14217.11
PROJECT NAME: FOURTH FLOOR PLAN

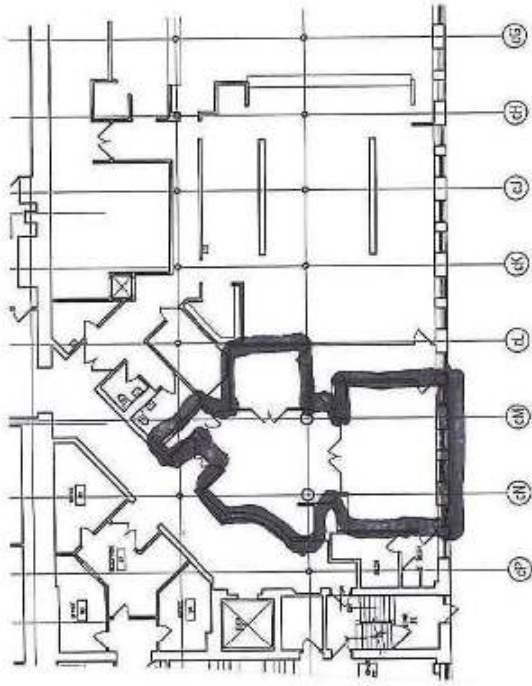
215 FIRST STREET
CAMBRIDGE,
MASSACHUSETTS

 - Shared Science Facility Kitchen area

EXHIBIT 2 TO LICENSE AGREEMENT

DESCRIPTION OR PLAN OF SHARED CONFERENCE FACILITY





ATHENAEUM STREET

FIRST FLOOR


 - Shared Conference Facility

EXHIBIT 3 TO LICENSE AGREEMENT

RULES AND REGULATIONS

Rules and regulations (if any) will be established and implemented by Licensor during the Term.

EXHIBIT F TO LEASE

TENANT IMPROVEMENTS PLANS

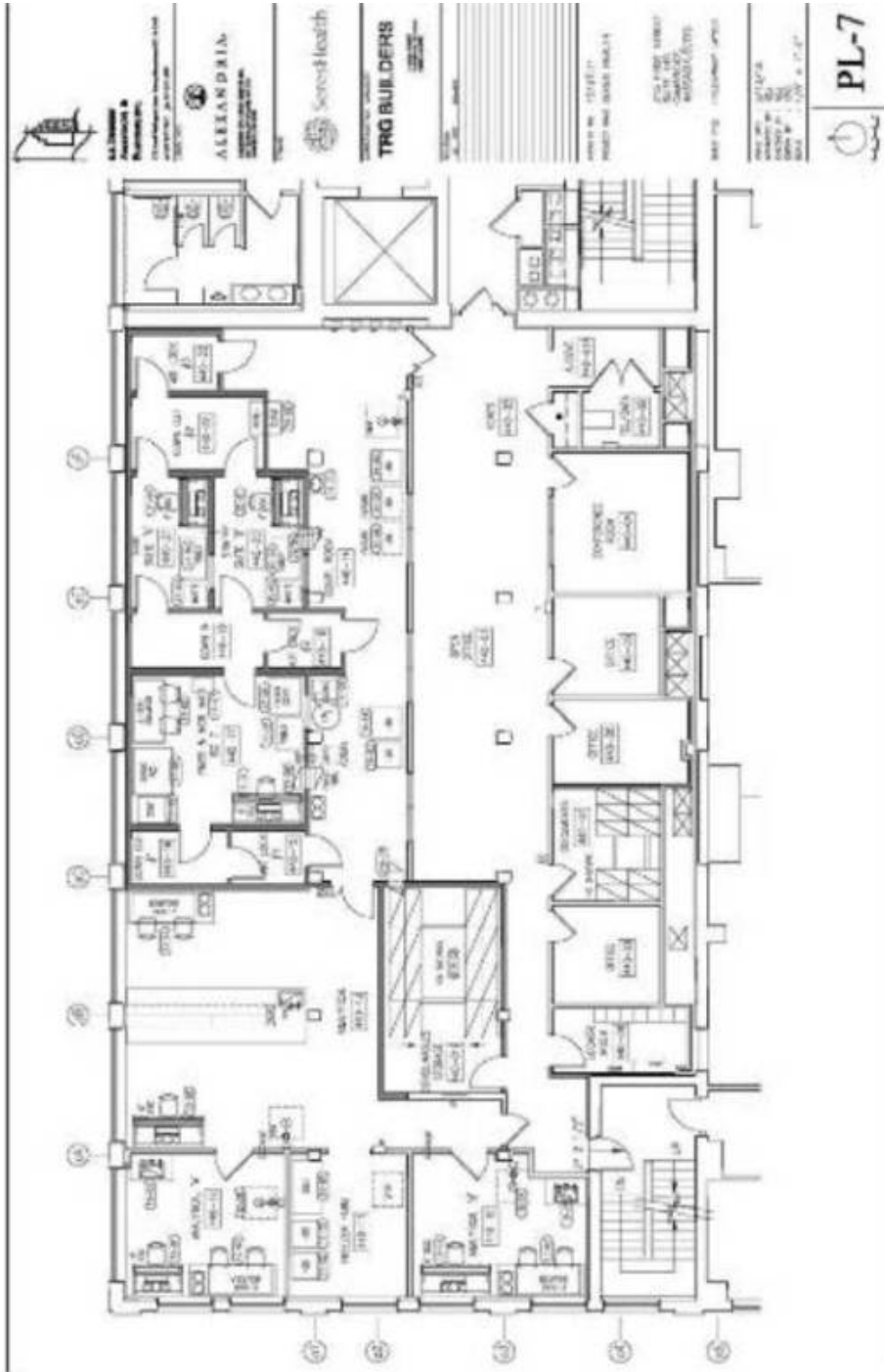


EXHIBIT G TO LEASE**ACKNOWLEDGMENT OF COMMENCEMENT DATE**

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made this 7th day of April, 2015 between **ARE-MA REGION NO. 38, LLC**, a Delaware limited liability company ("**Landlord**"), and **SERES HEALTH, INC.**, a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease dated April 6, 2015 (the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date of the Base Term of the Lease is April 7, 2015 and the termination date of the Base Term of the Lease shall be midnight on April 30, 2020. In case of a conflict between this Acknowledgment of Commencement Date and the Lease, this Acknowledgment of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this **ACKNOWLEDGMENT OF COMMENCEMENT DATE** to be effective on the date first above written.

TENANT:

SERES HEALTH, INC.,
a Delaware corporation

By: /s/ Eric Shaff

Its: CFO

LANDLORD:

ARE-MA REGION NO. 38, LLC, a Delaware limited liability corporation

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership, member

By: ARE-QRS Corp., a Maryland corporation, general partner

By: /s/ Eric Johnson

Its: Eric Johnson
Senior Vice President
RE Legal Affairs

EXHIBIT H TO LEASE

TENANT'S PERSONAL PROPERTY

None.

EXHIBIT I TO LEASE**Rules and Regulations**

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.
2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.
3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.
4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.
5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.
6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.
7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.
8. Tenant shall maintain the Premises free from rodents, insects and other pests.
9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.
10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.
11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.
12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.

13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.

14. No auction, public or private, will be permitted on the Premises or the Project.

15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.

16. The Premises shall not be used for lodging, sleeping or cooking (except that Tenant may use microwave ovens, toasters and coffee makers in the Premises for the benefit of Tenant's employees and contractors in an area designated for such items, but only if the use thereof is at all times supervised by the individual using the same) or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.

EXHIBIT J TO LEASE

NOTIFICATION OF THE PRESENCE OF ASBESTOS CONTAINING MATERIALS

This notification provides certain information about asbestos within or about the Premises at 215 First Street, Cambridge, MA (“**Building**”).

Historically, asbestos was commonly used in building products used in the construction of buildings across the country. Asbestos-containing building products were used because they are fire-resistant and provide good noise and temperature insulation. Because of their prevalence, asbestos-containing materials, or ACMs, are still sometimes found in buildings today.

No ACMs were identified in an asbestos survey of the building conducted in 2007. However, to avoid damage, several materials were not sampled and are presumed asbestos-containing materials or PACMs as listed in the following table:

Material Description	Material Location
Ceramic tile adhesive and grout	Throughout restrooms; ground floor hallways; first floor lobby and hallways
Built-up roofing beneath rubber	Throughout roof
Flashing cement	Roof
Flex connectors on HVAC units	Roof

The PACMs described above were observed to be in good condition and may be managed in place. Because ACMs may be present within or about the Building, we have hired an independent environmental consulting firm to prepare an operations and maintenance program (“**O&M Program**”). The O&M Program is designed to minimize the potential of any harmful asbestos exposure to any person within or about the Building. The O&M Program includes a description of work methods to be taken in order to maintain any ACMs or PACMs within or about the Building in good condition and to prevent any significant disturbance of such ACMs or PACMs. Appropriate personnel receive regular periodic training on how to properly administer the O&M Program.

The O&M Program describes the risks associated with asbestos exposure and how to prevent such exposure through appropriate work practices. ACMs and PACMs generally are not thought to be a threat to human health unless asbestos fibers are released into the air and inhaled. This does not typically occur unless (1) the ACMs are in a deteriorating condition, or (2) the ACMs have been significantly disturbed (such as through abrasive cleaning, or maintenance or renovation activities). If inhaled, asbestos fibers can accumulate in the lungs and, as exposure increases, the risk of disease (such as asbestosis or cancer) increases. However, measures to minimize exposure, and consequently minimize the accumulation of asbestos fibers, reduce the risks of adverse health effects.

The O&M Program describes a number of activities that should be avoided in order to prevent a release of asbestos fibers. In particular, you should be aware that some of the activities which may present a health risk include moving, drilling, boring, or otherwise disturbing ACMs. Consequently, such activities should not be attempted by any person not qualified to handle ACMs.

The O&M Program is available for review during regular business hours at Landlord’s office located at 400 Technology Square, Suite 101, Cambridge, MA 02139.

EXHIBIT K TO LEASE

FURNITURE

Open office area:

1 reception desk
8 work station desks

Conference room:

1 large table
12 chairs

Office 1

1 small table
4 chairs

Office 2

1 small table
5 chairs

Office 3

1 small table
4 chairs

Office 4

1 small table
4 chairs

Lab:

8 Lab chairs
2 small portable tables in the TC lab

EXHIBIT L TO LEASE

EQUIPMENT PLANS

SERIES D PREFERRED STOCK PURCHASE AGREEMENT

THIS SERIES D PREFERRED STOCK PURCHASE AGREEMENT is made as of the 19th day of December, 2014 by and between Seres Health, Inc., a Delaware corporation (the “**Company**”), and Nestlé Health Science US Holdings, Inc., a Delaware corporation (the “**Purchaser**”).

The parties hereby agree as follows:

1. Purchase and Sale of Preferred Stock.

1.1. Sale and Issuance of Series D and Series D-1 Preferred Stock.

(a) The Company shall adopt and file with the Secretary of State of the State of Delaware on or before the Closing (as defined below) the Amended and Restated Certificate of Incorporation in the form of Exhibit A attached to this Agreement (the “**Restated Certificate**”).

(b) Subject to the terms and conditions of this Agreement, at the Closing, the Purchaser agrees to purchase from the Company and the Company agrees to sell and issue to the Purchaser 2,222,222 shares of Series D Preferred Stock, \$0.001 par value per share (the “**Series D Preferred Stock**”), and 1,388,889 shares of Series D-1 Preferred Stock, \$0.001 par value per share (the “**Series D-1 Preferred Stock**”), in each case at a purchase price of \$18.00 per share (the “**Purchase Price**”). The shares of Series D Preferred Stock and Series D-1 Preferred Stock sold under this Agreement are referred to collectively as the “**Shares**.” All the transactions set forth herein to be taken at the Closing, including the delivery of documents, shall be deemed to take place simultaneously at the Closing.

1.2. Closing; Delivery.

(a) Closing. Subject to the terms and conditions of this Agreement, including the closing conditions set forth in Sections 4 and 5, the closing of the sale and purchase of the Shares (the “**Closing**”) shall take place remotely via the exchange of documents and signatures, on the date of this Agreement (the “**Closing Date**”). At the Closing, the Company will sell and issue to the Purchaser, and the Purchaser will purchase, the Shares at a price per share equal to the Purchase Price.

(b) Closing Deliverables. At the Closing, the Company shall deliver to the Purchaser certificates representing the Shares being purchased by the Purchaser at the Closing against payment of the purchase price therefor by wire transfer of immediately available funds to a bank account designated by the Company.

1.3. Use of Proceeds. In accordance with the directions of the Board of Directors of the Company (the “**Board**”), as it shall be constituted in accordance with the Voting Agreement, the Company will use the proceeds from the sale of the Shares for product development and other general corporate purposes.

1.4. **Defined Terms Used in this Agreement.** In addition to the terms defined above, the following terms used in this Agreement shall be construed to have the meanings set forth or referenced below.

(a) “**Affiliate**” means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

(b) “**Code**” means the United States Internal Revenue Code of 1986, as amended.

(c) “**Company Covered Person**” means, with respect to the Company as an “issuer” for purposes of Rule 506 promulgated under the Securities Act, any Person described in the first paragraph of Rule 506(d)(1).

(d) “**Company Intellectual Property**” means the Intellectual Property owned by or licensed to the Company and incorporated in, underlying or used in connection with the Product Candidates or the Internal Systems.

(e) “**Company Notice**” means written notice from the Company notifying the Purchaser that the Company is exercising its Right of First Refusal as to some or all of the Transfer Stock with respect to any Proposed Purchaser Transfer.

(f) “**Intellectual Property**” means all: (A) patents, patent applications, patent disclosures and all related continuation, continuation-in-part, divisional, reissue, reexamination, utility model, certificate of invention and design patents, patent applications, registrations and applications for registrations; (B) trademarks, service marks, trade dress, Internet domain names, logos, trade names and corporate names and registrations and applications for registration thereof; (C) copyrights and registrations and applications for registration thereof; (D) computer software, data and documentation; (E) inventions, trade secrets and confidential business information, whether patentable or nonpatentable and whether or not reduced to practice, know-how, manufacturing and product processes and techniques, research and development information, copyrightable works, financial marketing and business data, pricing and cost information, business and marketing plans and customer and supplier lists and information; (F) other proprietary rights relating to any of the foregoing (including remedies against infringements thereof and rights of protection of interest therein under the laws of all jurisdictions); and (G) copies and tangible embodiments thereof.

(g) “**Internal Systems**” means the internal systems of the Company that are used in its business or operations, including, computer hardware systems, software applications and embedded systems.

(h) “**Investors’ Rights Agreement**” means the agreement among the Company and the Purchaser and certain other stockholders of the Company dated as of the date of the Closing, in the form of Exhibit C attached to this Agreement.

(i) “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

(j) “**Key Employee**” means any executive-level employee (including vice president-level positions) as well as any employee or consultant who either alone or in concert with others develops, invents, programs or designs any Company Intellectual Property.

(k) “**Knowledge**,” including the phrase “to the Company’s knowledge,” shall mean the actual knowledge after reasonable investigation of Roger Pomerantz, John Aunins, David Cook and Matthew Henn.

(l) “**Material Adverse Effect**” means a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property, prospects or results of operations of the Company.

(m) “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

(n) “**Product Candidates**” means (A) the therapeutic, pharmaceutical and/or drug products that the Company (1) currently develops, manufactures, markets, sells or licenses or (2) currently plans to develop, manufacture, market, sell or license in the future and (B) the services that the Company (1) currently provides or (2) currently plans to provide in the future.

(o) “**Proposed Purchaser Transfer**” means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any Transfer Stock (or any interest therein) proposed by the Purchaser.

(p) “**Proposed Transfer Notice**” means written notice from the Purchaser setting forth the material terms and conditions of a Proposed Purchaser Transfer (including price and form of consideration), the identity of the Prospective Transferee and the intended closing date of the Proposed Purchaser Transfer.

(q) “**Prospective Transferee**” means any person to whom the Purchaser proposes to make a Proposed Purchaser Transfer.

(r) “**Purchased Common Shares**” means the shares of Common Stock purchased by the Purchaser pursuant to that certain Stock Purchase Agreement, dated as of December 19, 2014, by and between Flagship VentureLabs IV LLC and the Purchaser.

(s) “**Representatives**” means, as to any Person, such Person’s Affiliates, and its and their respective directors, officers, employees, managing members, general partners, agents and consultants (including attorneys, financial advisors and accountants).

(t) “**Right of First Refusal**” means the right, but not an obligation, of the Company, or its permitted transferees or assigns, to purchase all of the Transfer Stock in accordance with Section 6.

(u) “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(v) “**Tax**” or “**Taxes**” means (i) any foreign, federal, state or local income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall, profits, environmental, customs, capital stock, franchise, employees’ income withholding, foreign or domestic withholding, social security, unemployment, disability, real property, personal property, sales, use, transfer, value added, alternative or add-on minimum or other similar tax, governmental fee, governmental assessment or governmental charge, including any interest, penalties or additions to tax or additional amounts with respect to the foregoing, and (ii) any liability for the payment of any amounts of the type described in the immediately preceding clause (i) as a result of being a member of an affiliated, combined, consolidated or unitary group for any period, as a result of any tax sharing or tax allocation agreement, arrangement or understanding, or as a result of being liable for another Person’s taxes as a transferee or successor, by contractual obligation or otherwise.

(w) “**Tax Return**” means any return, declaration, report, estimate, claim for refund or information return or statement relating to Taxes, including any schedule or attachment thereto, and including any amendment thereof.

(x) “**Transaction Agreements**” means this Agreement, the Investors’ Rights Agreement and the Voting Agreement.

(y) “**Transfer Stock**” means the Shares, the Purchased Common Shares, the shares of Common Stock (as defined below) or Series D Preferred Stock, as applicable, issuable upon conversion of the Shares or upon conversion of the Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock and any shares of capital stock of the Company issued to the Purchaser after the date hereof in connection with any stock dividend, stock split, combination or other similar recapitalization with respect to the Shares, the Purchased Common Shares or the shares of Common Stock or Series D Preferred Stock, as applicable, issuable upon the conversion of the Shares or upon conversion of the Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock.

(z) “**Voting Agreement**” means the agreement among the Company, the Purchaser and certain other stockholders of the Company, dated as of the date of the Closing, in the form of Exhibit D attached to this Agreement.

2. Representations and Warranties of the Company. The Company hereby represents and warrants to the Purchaser that, except as set forth on the Disclosure Schedule attached as Exhibit B to this Agreement, which exceptions shall be deemed to be part of the representations and warranties made hereunder, the following representations are true and complete as of the date of the Closing, except as otherwise indicated. The Disclosure Schedule shall be arranged in sections corresponding to the numbered and lettered sections and

subsections contained in this Section 2, and the disclosures in any section or subsection of the Disclosure Schedule shall qualify other sections and subsections in this Section 2 only to the extent it is readily apparent from a reading of the disclosure that such disclosure is applicable to such other sections and subsections.

For purposes of these representations and warranties (other than those in Subsections 2.2, 2.3, 2.4, 2.5, and 2.6), the term “the Company” shall include any subsidiaries of the Company, unless otherwise noted herein.

2.1. Organization, Good Standing, Corporate Power and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as presently conducted and as proposed to be conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a Material Adverse Effect.

2.2. Capitalization.

(a) The authorized capital of the Company consists, immediately prior to the Closing, of:

(i) 38,000,000 shares of common stock, \$0.001 par value per share (the “**Common Stock**”), 6,890,750 shares of which are issued and outstanding immediately prior to the Closing. All of the outstanding securities of the Company have been duly authorized, are fully paid and nonassessable and were issued in compliance with all applicable federal and state securities laws. The Company holds no Common Stock in its treasury.

(ii) 24,348,003 shares of Preferred Stock, of which (A) 8,230,997 shares have been designated Series A Preferred Stock, all of which are issued and outstanding immediately prior to the Closing, (B) 2,339,319 shares have been designated Series A-2 Preferred Stock, 2,247,192 of which are issued and outstanding immediately prior to the Closing, (C) 4,831,359 shares have been designated Series B Preferred Stock, all of which are issued and outstanding immediately prior to the Closing, (D) 3,946,328 shares have been designated Series C Preferred Stock, all of which are issued and outstanding immediately prior to the Closing, (E) 3,611,111 shares have been designated Series D Preferred Stock, none of which is issued or outstanding immediately prior to the Closing, and (F) 1,388,889 shares have been designated Series D-1 Preferred Stock, none of which is issued or outstanding immediately prior to the Closing. The rights, privileges and preferences of the Preferred Stock are as stated in the Restated Certificate and as provided by the Delaware General Corporation Law. The Company holds no Preferred Stock in its treasury.

(b) The Company has reserved 3,608,029 shares of Common Stock for issuance to officers, directors, employees and consultants of the Company pursuant to its 2012 Stock Incentive Plan duly adopted by the Board and approved by the Company’s stockholders (as amended, the “**Stock Plan**”). Options to purchase all of such shares have been granted and are currently outstanding under the Stock Plan or have been exercised for shares for Common Stock. The Company has made available to the Purchaser complete and accurate copies of the Stock Plan and forms of agreements used thereunder.

(c) Subsection 2.2(c) of the Disclosure Schedule sets forth the capitalization of the Company immediately following the Closing including the number of shares of the following: (i) issued and outstanding Common Stock, including, with respect to restricted Common Stock, vesting schedule and repurchase price; (ii) granted stock options, including vesting schedule and exercise price; (iii) shares of Common Stock reserved for future award grants under the Stock Plan; (iv) each series of Preferred Stock; and (v) warrants or stock purchase rights, if any. Except for (A) the conversion privileges of the Shares to be issued under this Agreement, (B) the rights provided in Section 4 of the Investors' Rights Agreement, and (C) the securities and rights described in Subsection 2.2(b) of this Agreement and Subsection 2.2(c) of the Disclosure Schedule, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, to purchase or acquire from the Company any shares of Common Stock or Preferred Stock, or any securities convertible into or exchangeable for shares of Common Stock or Preferred Stock. All outstanding shares of the Company's Common Stock and all shares of the Company's Common Stock underlying outstanding options are subject to (i) a right of first refusal in favor of the Company upon any proposed transfer (other than transfers for estate planning purposes); and (ii) a lock-up or market standoff agreement of not less than 180 days following the Company's initial public offering pursuant to a registration statement filed with the Securities and Exchange Commission under the Securities Act.

(d) None of the Company's stock purchase agreements or stock option documents contains a provision for acceleration of vesting (or lapse of a repurchase right) or other changes in the vesting provisions or other terms of such agreement or understanding upon the occurrence of any event or combination of events, including without limitation in the case where the Stock Plan is not assumed in an acquisition. The Company has never adjusted or amended the exercise price of any stock options previously awarded, whether through amendment, cancellation, replacement grant, repricing, or any other means. Except as set forth in the Restated Certificate, the Company has no obligation (contingent or otherwise) to purchase or redeem any of its capital stock.

(e) 409A. The Company believes in good faith that any "nonqualified deferred compensation plan" (as such term is defined under Section 409A(d)(1) of the Code and the guidance thereunder) under which the Company makes, is obligated to make or promises to make, payments (each, a "**409A Plan**") complies in all material respects, in both form and operation, with the requirements of Section 409A of the Code and the guidance thereunder. To the knowledge of the Company, no payment to be made under any 409A Plan is, or will be, subject to the penalties of Section 409A(a)(1) of the Code.

2.3. Subsidiaries. The Company does not currently own or control, directly or indirectly, any interest in any other corporation, partnership, trust, joint venture, limited liability company, association, or other business entity. The Company is not a participant in any joint venture, partnership or similar arrangement.

2.4. Authorization. All corporate action required to be taken by the Board and the Company's stockholders in order to authorize the Company to enter into the Transaction Agreements, and to issue the Shares at the Closing, the shares of Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock and the Common Stock issuable upon conversion of the Shares and upon conversion of the shares of Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock, has been taken or will be taken prior to the Closing. All action on the part of the officers of the Company necessary for the execution and delivery of the Transaction Agreements, the performance of all obligations of the Company under the Transaction Agreements to be performed as of the Closing, and the issuance and delivery of the Shares has been taken or will be taken prior to the Closing. The Transaction Agreements, when executed and delivered by the Company, shall constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies or (iii) to the extent the indemnification provisions contained in the Investors' Rights Agreement may be limited by applicable federal or state securities laws.

2.5. Valid Issuance of Shares.

(a) The Shares, when issued, sold and delivered in accordance with the terms and for the consideration set forth in this Agreement, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable state and federal securities laws and liens or encumbrances created by or imposed by the Purchaser. Assuming the accuracy of the representations of the Purchaser in Section 3 of this Agreement and subject to the filings described in Subsection 2.6(ii) below, the Shares will be issued in compliance with all applicable federal and state securities laws. The Common Stock issuable upon conversion of the Shares, the Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock and the Common Stock issuable upon conversion of the Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock has been duly reserved for issuance, and upon issuance in accordance with the terms of the Restated Certificate, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable federal and state securities laws and liens or encumbrances created by or imposed by the Purchaser. Based in part upon the representations of the Purchaser in Section 3 of this Agreement, and subject to Subsection 2.6 below, the Common Stock issuable upon conversion of the Shares and upon conversion of the Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock will be issued in compliance with all applicable federal and state securities laws.

(b) No "bad actor" disqualifying event described in Rule 506(d)(1)(i)-(viii) under the Securities Act (a "**Disqualification Event**") is applicable to the Company or, to the Company's knowledge, any Company Covered Person, except for a Disqualification Event as to which Rule 506(d)(2)(ii-iv) or (d)(3), is applicable.

2.6. Governmental Consents and Filings. Assuming the accuracy of the representations made by the Purchaser in Section 3 of this Agreement, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required on the part of the Company in connection with the consummation of the transactions contemplated by this Agreement, except for (i) the filing of the Restated Certificate, which will have been filed as of the Closing, and (ii) filings pursuant to Regulation D of the Securities Act, and applicable state securities laws, which have been made or will be made in a timely manner.

2.7. Litigation. There is no claim, action, suit, proceeding, arbitration, complaint, charge or investigation pending or to the Company's knowledge, currently threatened (i) against the Company or any officer, director or Key Employee of the Company; (ii) to the Company's knowledge, that questions the validity of the Transaction Agreements or the right of the Company to enter into them, or to consummate the transactions contemplated by the Transaction Agreements; or (iii) to the Company's knowledge, that would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect. Neither the Company nor, to the Company's knowledge, any of its officers, directors or Key Employees is a party or is named as subject to the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality (in the case of officers, directors or Key Employees, such as would affect the Company). There is no action, suit, proceeding or investigation by the Company pending or which the Company intends to initiate. The foregoing includes, without limitation, actions, suits, proceedings or investigations pending or threatened in writing (or any basis therefor known to the Company) involving the prior employment of any of the Company's employees, their services provided in connection with the Company's business, or any information or techniques allegedly proprietary to any of their former employers, or their obligations under any agreements with prior employers.

2.8. Intellectual Property.

(a) Subsection 2.8(a) of the Disclosure Schedule lists (i) each patent, patent application, copyright registration or application therefor, and trademark, service mark and domain name registration or application therefor of the Company and (ii) each Product Candidate of the Company.

(b) Each current and former employee, consultant and officer of the Company has executed an agreement with the Company regarding the assignment of inventions substantially in the form or forms delivered to the counsel for the Purchaser. No current or former Key Employee has excluded works or inventions from his or her assignment of inventions pursuant to any such agreement.

(c) The Company (i) owns or has the right to use all Intellectual Property necessary (A) to develop, provide, manufacture, market and sell the Product Candidates that the Company currently develops, manufactures, markets, sells or licenses and (B) to operate the Internal Systems and (ii) owns, has the right to use or reasonably believes it can acquire on commercially reasonable terms all Intellectual Property necessary to develop, provide, manufacture, market and sell the Product Candidates that the Company currently plans to develop, manufacture, market, sell or license in the future. The Company has taken all

reasonable measures to protect the proprietary nature of each item of Company Intellectual Property, and to maintain in confidence all trade secrets and confidential information, that it owns or uses. The patents and patent applications of the Company were prepared, filed and prosecuted in accordance with applicable laws and regulations, and have been duly maintained and are in full force and effect. No other person or entity has any rights to any of the Company Intellectual Property owned by the Company (except pursuant to agreements or licenses specified in the Subsection 2.8(b) of the Disclosure Schedule), and, to the best of the Company's knowledge, no other person or entity is infringing, violating or misappropriating any of the Company Intellectual Property. To the Company's knowledge, there are no pending or threatened legal or governmental proceedings relating to any Company Intellectual Property, other than ex parte examination proceedings before the US Patent and Trademark Office or corresponding foreign patent offices.

(d) To the Company's knowledge, none of the Product Candidates currently under development by the Company, or the development, marketing, sale, provision or use thereof, infringes or violates, or constitutes a misappropriation of, any Intellectual Property rights of any person or entity, and neither the marketing, sale, provision or use of any Product Candidates currently under development by the Company will, when such Product Candidates are commercially released by the Company, infringe or violate, or constitute a misappropriation of, any Intellectual Property rights of any person or entity that exist as of the date of the Closing. None of the Internal Systems owned by the Company or, to the Company's knowledge, licensed to the Company, or the use thereof, infringes or violates, or constitutes a misappropriation of, any Intellectual Property rights of any person or entity. Subsection 2.8(c) of the Disclosure Schedule lists any complaint, claim or notice, or written threat thereof, received by the Company alleging any such infringement, violation or misappropriation; and the Company has made available to the Purchaser complete and accurate copies of all written documentation in the possession of the Company relating to any such complaint, claim, notice or threat. The Company has made available to the Purchaser complete and accurate copies of all written documentation in the Company's possession relating to claims or disputes known to the Company concerning any Company Intellectual Property.

(e) Subsection 2.8(e) of the Disclosure Schedule identifies each license or other agreement pursuant to which the Company has licensed, distributed or otherwise granted any rights to any third party with respect to, any Company Intellectual Property. Except as described in Subsection 2.8(e) of the Disclosure Schedule, the Company has not agreed to indemnify any person or entity against any infringement, violation or misappropriation of any Intellectual Property rights with respect to any Company Intellectual Property.

(f) Subsection 2.8(f) of the Disclosure Schedule identifies each item of Company Intellectual Property that is owned by a party other than the Company, and the license or agreement pursuant to which the Company uses it (excluding off-the-shelf software programs licensed by the Company pursuant to "shrink wrap" or "click through" licenses).

(g) All of the copyrightable materials incorporated in, underlying or used with the Product Candidates have been created by employees of the Company within the scope of their employment by the Company or by independent contractors of the Company who have executed agreements expressly assigning all right, title and interest in such copyrightable materials to the Company. No portion of such copyrightable materials was jointly developed with any third party.

2.9. Compliance with Other Instruments. The Company is not in violation or default (i) of any provisions of its Restated Certificate or Bylaws, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound that is required to be listed on the Disclosure Schedule, or, to its knowledge, of any provision of federal or state statute, rule or regulation applicable to the Company, the violation of which would have a Material Adverse Effect. The execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated by the Transaction Agreements will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event which results in the creation of any lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to the Company.

2.10. Agreements; Actions.

(a) Except for the Transaction Agreements and except as set forth in Subsection 2.10 of the Disclosure Schedule, there are no agreements, understandings, instruments, contracts or proposed transactions to which the Company is a party or by which it is bound that involve (i) obligations (contingent or otherwise) of, or payments to, the Company in excess of \$100,000, (ii) the license of any patent, copyright, trademark, trade secret or other proprietary right to or from the Company (excluding off-the-shelf software programs licensed by the Company pursuant to “shrink wrap” or “click through” licenses), (iii) the grant of rights to manufacture, produce, assemble, license, market, or sell its products to any other Person that limit the Company’s exclusive right to develop, manufacture, assemble, distribute, market or sell its products, or (iv) indemnification by the Company with respect to infringements of proprietary rights.

(b) The Company has not (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or incurred any other liabilities individually in excess of \$200,000 or in excess of \$500,000 in the aggregate, (iii) made any loans or advances to any Person, other than ordinary advances for travel expenses, or (iv) sold, exchanged or otherwise disposed of any of its assets or rights, other than the sale of its inventory in the ordinary course of business. For the purposes of subsections (b) and (c) of this Subsection 2.10, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same Person (including Persons the Company has reason to believe are affiliated with each other) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(c) The Company is not a guarantor or indemnitor of any indebtedness of any other Person.

2.11. Certain Transactions.

(a) Other than (i) standard employee benefits generally made available to all employees, (ii) standard director and officer indemnification agreements approved by the Board and (iii) the purchase of shares of the Company's capital stock and the issuance of options to purchase shares of the Company's Common Stock, in each instance, approved in the written minutes of the Board (previously made available to the Purchaser or its counsel), there are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, consultants or Key Employees, or any Affiliate thereof.

(b) The Company is not indebted, directly or indirectly, to any of its directors, officers or employees or to their respective spouses or children or to any Affiliate of any of the foregoing, other than in connection with expenses or advances of expenses incurred in the ordinary course of business or employee relocation expenses and for other customary employee benefits made generally available to all employees. None of the Company's directors, officers or employees, or any members of their immediate families, or any Affiliate of the foregoing are, directly or indirectly, indebted to the Company or, to the Company's knowledge, have any (i) material commercial, industrial, banking, consulting, legal, accounting, charitable or familial relationship with any of the Company's customers, suppliers, service providers, joint venture partners, licensees and competitors, (ii) direct or indirect ownership interest in any firm or corporation with which the Company is affiliated or with which the Company has a business relationship, or any firm or corporation which competes with the Company except that directors, officers or employees or stockholders of the Company may own stock in (but not exceeding two percent (2%) of the outstanding capital stock of) publicly traded companies that may compete with the Company or (iii) financial interest in any material contract with the Company.

2.12. Rights of Registration and Voting Rights. Except as provided in the Investors' Rights Agreement, the Company is not under any obligation to register under the Securities Act any of its currently outstanding securities or any securities issuable upon exercise or conversion of its currently outstanding securities. To the Company's knowledge, except as contemplated in the Voting Agreement, no stockholder of the Company has entered into any agreements with respect to the voting of capital shares of the Company.

2.13. Property. The property and assets that the Company owns are free and clear of all mortgages, deeds of trust, liens, loans and encumbrances, except for statutory liens for the payment of current Taxes that are not yet delinquent and encumbrances and liens that arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets. With respect to the property and assets it leases, the Company is in compliance with such leases and, to its knowledge, holds a valid leasehold interest free of any liens, claims or encumbrances other than those of the lessors of such property or assets. The Company does not own any real property.

2.14. Financial Statements. The Company has delivered to the Purchaser its audited financial statements as of December 31, 2013 and unaudited financial statements as of September 30, 2014 (collectively, the "Financial Statements"). The Financial Statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated, except that they may not contain all footnotes

required by generally accepted accounting principles. The Financial Statements fairly present in all material respects the financial condition and operating results of the Company as of the dates, and for the periods, indicated therein, subject to normal year-end audit adjustments. Except as set forth in the Financial Statements, the Company has no material liabilities or obligations, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to September 30, 2014, (ii) obligations under contracts and commitments incurred in the ordinary course of business and (iii) liabilities and obligations of a type or nature not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in all such cases, individually and in the aggregate would not have a Material Adverse Effect. The Company maintains and will continue to maintain a standard system of accounting established and administered in accordance with generally accepted accounting principles.

2.15. Changes. Since September 30, 2014 there has not been:

(a) any change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the Financial Statements, except changes in the ordinary course of business that have not caused, in the aggregate, a Material Adverse Effect;

(b) any damage, destruction or loss, whether or not covered by insurance, that would have a Material Adverse Effect;

(c) any waiver or compromise by the Company of a valuable right or of a material debt owed to it;

(d) any satisfaction or discharge of any lien, claim, or encumbrance or payment of any obligation by the Company, except in the ordinary course of business and the satisfaction or discharge of which would not have a Material Adverse Effect;

(e) any material change to a material contract or agreement by which the Company or any of its assets is bound or subject;

(f) any material change in any compensation arrangement or agreement with any employee, officer, director or stockholder;

(g) any resignation or termination of employment of any officer or Key Employee of the Company;

(h) any mortgage, pledge, transfer of a security interest in, or lien, created by the Company, with respect to any of its material properties or assets, except liens for Taxes not yet due or payable and liens that arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets;

(i) any loans or guarantees made by the Company to or for the benefit of its employees, officers or directors, or any members of their immediate families, other than travel advances and other advances made in the ordinary course of its business;

(j) any declaration, setting aside or payment or other distribution in respect of any of the Company's capital stock, or any direct or indirect redemption, purchase, or other acquisition of any of such stock by the Company;

(k) any sale, assignment or transfer of any Company Intellectual Property that could reasonably be expected to result in a Material Adverse Effect;

(l) receipt of notice that there has been a loss of, or material order cancellation by, any major customer of the Company;

(m) to the Company's knowledge, any other event or condition of any character, other than events affecting the economy or the Company's industry generally, that could reasonably be expected to result in a Material Adverse Effect; or

(n) any arrangement or commitment by the Company to do any of the things described in this Subsection 2.15.

2.16. Employee Matters.

(a) As of the date hereof, the Company employs the number of full-time employees and the number of part-time employees and engages the number of consultants or independent contractors set forth in Subsection 2.16 of the Disclosure Schedule. Subsection 2.16 of the Disclosure Schedule sets forth a detailed description of all compensation, including salary, bonus, severance obligations and deferred compensation paid or payable for each officer, employee, consultant and independent contractor of the Company who received compensation in excess of \$100,000 for the fiscal year ended December 31, 2013 or is anticipated to receive compensation in excess of \$100,000 for the fiscal year ending December 31, 2014.

(b) To the Company's knowledge, none of its employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with such employee's ability to promote the interest of the Company or that would conflict with the Company's business. Neither the execution or delivery of the Transaction Agreements, nor the carrying on of the Company's business by the employees of the Company, nor the conduct of the Company's business as now conducted and as presently proposed to be conducted, will, to the Company's knowledge, conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated.

(c) The Company is not delinquent in payments to any of its employees, consultants, or independent contractors for any wages, salaries, commissions, bonuses, or other direct compensation for any service performed for it to the date hereof or amounts required to be reimbursed to such employees, consultants, or independent contractors. The Company has complied in all material respects with all applicable state and federal equal employment opportunity laws and with other laws related to employment, including those related to wages, hours, worker classification, and collective bargaining. The Company has withheld and paid to the appropriate governmental entity or is holding for payment not yet due to such governmental entity all amounts required to be withheld from employees of the Company and is not liable for any arrears of wages, Taxes, penalties, or other sums for failure to comply with any of the foregoing.

(d) To the Company's knowledge, no Key Employee intends to terminate employment with the Company or is otherwise likely to become unavailable to continue as a Key Employee, nor does the Company have a present intention to terminate the employment of any of the foregoing. The employment of each employee of the Company is terminable at the will of the Company. Except as set forth in Subsection 2.16 of the Disclosure Schedule or as required by law, upon termination of the employment of any such employees, no severance or other payments will become due. Except as set forth in Subsection 2.16 of the Disclosure Schedule, the Company has no policy, practice, plan, or program of paying severance pay or any form of severance compensation in connection with the termination of employment services.

(e) The Company has not made any representations regarding equity incentives to any officer, employees, director or consultant that are inconsistent with the share amounts and terms set forth in the minutes of meetings of the Board.

(f) Each former Key Employee whose employment was terminated by the Company has entered into an agreement with the Company providing for the full release of any claims against the Company or any related party arising out of such employment.

(g) Subsection 2.16 of the Disclosure Schedule sets forth each employee benefit plan maintained, established or sponsored by the Company, or which the Company participates in or contributes to, which is subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). The Company has made all required contributions and has no liability to any such employee benefit plan, other than liability for health plan continuation coverage described in Part 6 of Title I(B) of ERISA, and has complied in all material respects with all applicable laws for any such employee benefit plan.

(h) The Company is not bound by or subject to (and none of its assets or properties is bound by or subject to) any written or oral, express or implied, contract, commitment or arrangement with any labor union, and no labor union has requested or, to the knowledge of the Company, has sought to represent any of the employees, representatives or agents of the Company. There is no strike or other labor dispute involving the Company pending, or to the Company's knowledge, threatened, which could have a Material Adverse Effect, nor is the Company aware of any labor organization activity involving its employees.

(i) To the Company's knowledge, none of its officers or other Key Employees has been (a) subject to voluntary or involuntary petition under the federal bankruptcy laws or any state insolvency law or the appointment of a receiver, fiscal agent or similar officer by a court for his business or property; (b) convicted in a criminal proceeding or named as a subject of a pending criminal proceeding (excluding traffic violations and other minor offenses); (c) subject to any order, judgment, or decree (not subsequently reversed, suspended, or vacated) of any court of competent jurisdiction permanently or temporarily enjoining him from engaging, or otherwise imposing limits or conditions on his engagement in any securities, investment

advisory, banking, insurance, or other type of business or acting as an officer or director of a public company; or (d) found by a court of competent jurisdiction in a civil action or by the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated any federal or state securities, commodities, or unfair trade practices law, which such judgment or finding has not been subsequently reversed, suspended, or vacated.

2.17. Tax Returns and Payments. There are no federal, state, county, local or foreign Taxes due and payable by the Company which have not been timely paid. There are no accrued and unpaid federal, state, county, local or foreign Taxes of the Company which are due, whether or not assessed or disputed. There have been no examinations or audits of any Tax Returns by any applicable federal, state, county, local or foreign governmental agency, nor, to the Company's knowledge, threatened in writing. The Company has duly and timely filed all federal, state, county, local and foreign Tax Returns required to have been filed by it, and all such Tax Returns were true, correct, and complete in all material respects. The Company has never received any notice of any Tax deficiency proposed or assessed against it, and there are in effect no waivers of applicable statutes of limitations with respect to Taxes for any year. The Company does not have any liabilities for Taxes of any other person or entity by contract, as a transferee or successor, under U.S. Treasury Regulation section 1.1502-6 or analogous state, county, local or foreign provision or otherwise.

2.18. Insurance. The Company has in full force and effect fire and casualty insurance policies with extended coverage, sufficient in amount (subject to reasonable deductions) to allow it to replace any of its properties that might be damaged or destroyed.

2.19. Employee Agreements. Each current and former employee, consultant and officer of the Company has executed an agreement with the Company regarding confidentiality and proprietary information substantially in the form or forms delivered to the counsel for the Purchaser (the "Confidential Information Agreements"). Each current and former Key Employee has executed a non-competition and non-solicitation agreement substantially in the form or forms delivered to counsel for the Purchaser. The Company is not aware that any of its Key Employees is in violation of any agreement covered by this Subsection 2.19.

2.20. Permits. The Company has all franchises, permits, licenses and any similar authority necessary for the conduct of its business, the lack of which could reasonably be expected to have a Material Adverse Effect. The Company is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

2.21. Clinical Trials. The studies, tests and preclinical and clinical trials, if any, conducted by or on behalf of the Company are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional and scientific standards for products or product candidates comparable to those being developed by the Company and all applicable laws and regulations. The descriptions of, protocols for, and data and other results of, the studies, tests and trials conducted by or on behalf of the Company that have been furnished or made available to the Purchaser are accurate and complete. The Company is not aware of any studies, tests or trials the results of which reasonably call into question the results of the studies, tests and trials conducted by or on behalf

of the Company, and the Company has not received any notices or correspondence from the United States Food and Drug Administration (the “**FDA**”) or any foreign, state or local agency or governmental body exercising comparable authority (each a “**Governmental Entity**”) or any Institutional Review Board or comparable authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company.

2.22. **FDA**. The Company possesses all permits, licenses, registrations, certificates, authorizations, orders and approvals from the appropriate federal, state or foreign regulatory authorities necessary to conduct its business, including all such permits, licenses, registrations, certificates, authorizations, orders and approvals required by the FDA or any other federal, state or foreign agencies or bodies engaged in the regulation of pharmaceuticals or biohazardous materials. The Company has not received any notice of proceedings relating to the suspension, modification, revocation or cancellation of any such permit, license, registration, certificate, authorization, order or approval. Neither the Company nor, to the Company’s knowledge, any officer, employee or agent of the Company has been convicted of any crime or engaged in any conduct that has previously caused or would reasonably be expected to result in (A) disqualification or debarment by the FDA under 21 U.S.C. Sections 335(a) or (b), or any similar law, rule or regulation of any other Governmental Entities, or (B) exclusion under 42 U.S.C. Section 1320a-7 or any similar law, rule or regulation of any Governmental Entities.

2.23. **Corporate Documents**. The Restated Certificate and Bylaws of the Company are in the form made available to the Purchaser. The copy of the minute books of the Company made available to the Purchaser contains minutes of all meetings of directors and stockholders and all actions by written consent without a meeting by the directors and stockholders since the date of incorporation and accurately reflects in all material respects all actions by the directors (and any committee of directors) and stockholders with respect to all transactions referred to in such minutes.

2.24. **Environmental and Safety Laws**. Except as could not reasonably be expected to have a Material Adverse Effect, to the best of its knowledge: (a) the Company is and has been in compliance with all Environmental Laws; (b) there has been no release or to the Company’s knowledge threatened release of any pollutant, contaminant or toxic or hazardous material, substance or waste, or petroleum or any fraction thereof, (each a “**Hazardous Substance**”) on, upon, into or from any site currently or heretofore owned, leased or otherwise used by the Company; (c) there have been no Hazardous Substances generated by the Company that have been disposed of or come to rest at any site that has been included in any published U.S. federal, state or local “superfund” site list or any other similar list of hazardous or toxic waste sites published by any governmental authority in the United States; and (d) there are no underground storage tanks located on, no polychlorinated biphenyls (“**PCBs**”) or PCB-containing equipment used or stored on, and no hazardous waste as defined by the Resource Conservation and Recovery Act, as amended, stored on, any site owned or operated by the Company, except for the storage of hazardous waste in compliance with Environmental Laws. The Company has made available to the Purchaser true and complete copies of all material environmental records, reports, notifications, certificates of need, permits, pending permit applications, correspondence, engineering studies, and environmental studies or assessments.

For purposes of this Subsection 2.24, “Environmental Laws” means any law, regulation, or other applicable requirement relating to (a) releases or threatened release of Hazardous Substance; (b) pollution or protection of employee health or safety, public health or the environment; or (c) the manufacture, handling, transport, use, treatment, storage, or disposal of Hazardous Substances.

2.25. Qualified Small Business Stock. As of and immediately following the Closing: (i) the Company will be an eligible corporation as defined in Section 1202(e)(4) of the Code, (ii) the Company will not have made purchases of its own stock described in Code Section 1202(c)(3)(B) during the one-year period preceding the Closing, except for purchases that are disregarded for such purposes under Treasury Regulation Section 1.1202-2 and (iii) the Company’s aggregate gross assets, as defined by Code Section 1202(d)(2), at no time between its incorporation and through the Closing have exceeded \$50 million, taking into account the assets of any corporations required to be aggregated with the Company in accordance with Code Section 1202(d)(3); provided, however, that in no event shall the Company be liable to the Purchaser or any other party for any damages arising from any subsequently proven or identified error in the Company’s determination with respect to the applicability or interpretation of Code Section 1202, unless such determination shall have been given by the Company in a manner either grossly negligent or fraudulent.

2.26. Shell Company Status. The Company is not, nor has it ever been, an issuer identified in Rule 144(i)(1) promulgated under the Securities Act.

2.27. Investment Company. The Company is not an investment company within the meaning of the Investment Company Act of 1940, as amended.

2.28. Disclosure. The Company has made available to the Purchaser all the information reasonably available to the Company that the Purchaser has requested for deciding whether to acquire the Shares. No representation or warranty of the Company contained in this Agreement, as qualified by the Disclosure Schedule, and no certificate furnished or to be furnished to the Purchaser at the Closing contains any untrue statement of a material fact or, to the Company’s knowledge, omits to state a material fact necessary in order to make the statements contained herein or therein not misleading in light of the circumstances under which they were made. It is understood that this representation is qualified by the fact that the Company has not delivered to the Purchaser, and has not been requested to deliver, a private placement or similar memorandum or any written disclosure of the types of information customarily furnished to purchasers of securities.

3. Representations and Warranties of the Purchaser. The Purchaser hereby represents and warrants to the Company that:

3.1. Authorization. The Purchaser has full power and authority to enter into the Transaction Agreements. The Transaction Agreements to which the Purchaser is a party, when executed and delivered by the Purchaser, will constitute valid and legally binding obligations of the Purchaser, enforceable in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, and any other laws of general application affecting enforcement of creditors’ rights generally, and as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, or (b) to the extent the indemnification provisions contained in the Investors’ Rights Agreement may be limited by applicable federal or state securities laws.

3.2. Purchase Entirely for Own Account. This Agreement is made with the Purchaser in reliance upon the Purchaser's representation to the Company, which by the Purchaser's execution of this Agreement, the Purchaser hereby confirms, that the Shares to be acquired by the Purchaser will be acquired for investment for the Purchaser's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same. By executing this Agreement, the Purchaser further represents that the Purchaser does not presently have any contract, undertaking, agreement or arrangement with any Person to sell, transfer or grant participations to such Person or to any third Person, with respect to any of the Shares. The Purchaser has not been formed for the specific purpose of acquiring the Shares.

3.3. Disclosure of Information. The Purchaser has had an opportunity to discuss the Company's business, management, financial affairs and the terms and conditions of the offering of the Shares with the Company's management and has had an opportunity to review the Company's facilities. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 2 of this Agreement or the right of the Purchaser to rely thereon.

3.4. Restricted Securities. The Purchaser understands that the Shares have not been, and will not be, registered under the Securities Act, by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Purchaser's representations as expressed herein. The Purchaser understands that the Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Purchaser must hold the Shares indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. The Purchaser acknowledges that the Company has no obligation to register or qualify the Shares, the Series D Preferred Stock into which the Series D-1 Preferred stock may be converted or the Common Stock into which such Shares or Series D Preferred Stock may be converted, for resale except as set forth in the Investors' Rights Agreement. The Purchaser further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Shares, and on requirements relating to the Company which are outside of the Purchaser's control, and which the Company is under no obligation and may not be able to satisfy.

3.5. No Public Market. The Purchaser understands that no public market now exists for the Shares, and that the Company has made no assurances that a public market will ever exist for the Shares.

3.6. Legends. The Purchaser understands that the Shares and any securities issued in respect of or exchange for the Shares, may bear one or all of the following legends:

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933."

(b) Any legend set forth in, or required by, the other Transaction Agreements.

(c) Any legend required by the securities laws of any state to the extent such laws are applicable to the Shares represented by the certificate so legended.

3.7. Accredited Investor. The Purchaser is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act

3.8. Foreign Investors. If the Purchaser is not a United States person (as defined by Section 7701(a)(30) of the Code), the Purchaser hereby represents that it has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Shares or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Shares that are applicable to the Purchaser, (ii) any foreign exchange restrictions applicable with respect to such purchase by the Purchaser, (iii) any governmental or other consents that may need to be obtained by the Purchaser, and (iv) the income tax and other tax consequences, if any, that may be relevant to the Purchaser in connection the purchase, holding, redemption, sale, or transfer of the Shares. The Purchaser's subscription and payment for and continued beneficial ownership of the Shares will not violate any applicable securities or other laws of the Purchaser's jurisdiction applicable to it. For the avoidance of doubt, the Purchaser is not making any representations or warranties as to the actions taken or required to be taken by the Company in connection herewith.

3.9. No General Solicitation. Neither the Purchaser, nor any of its officers, directors, employees, agents, stockholders or partners has either directly or indirectly, including through a broker or finder (a) engaged in any general solicitation, or (b) published any advertisement in connection with the offer and sale of the Shares.

3.10. Exculpation. The Purchaser acknowledges that it is not relying upon any Person, other than the Company and its officers and directors, in making its investment or decision to invest in the Company.

3.11. Residence. If the Purchaser is an individual, then the Purchaser resides in the state or province identified in the address of the Purchaser set forth on its signature page hereto; if the Purchaser is a partnership, corporation, limited liability company or other entity, then the office or offices of the Purchaser in which its principal place of business is identified is the address or addresses of the Purchaser set forth on its signature page hereto.

3.12. Bad Actor Matters. If the Purchaser is (or, as a result of the exercise of its purchase of Shares hereunder, will become) a beneficial owner of 20% or more of the Company's outstanding voting securities, calculated on the basis of voting power, or otherwise a Person described in the first paragraph of Rule 506(d)(1) promulgated under the Securities Act, neither (i) the Purchaser, (ii) any of its directors, officers (as defined under Rule 16a-1 promulgated under the Exchange Act), other officers that may serve as a director or officer of the Company, general partners or managing members, nor (iii) any beneficial owner of the Purchaser which is a 20% beneficial owner of the voting securities of the Company (in accordance with Rule 506(d) promulgated under the Securities Act) is subject to any Disqualification Event (as defined in Section 2.5).

4. Conditions to the Purchaser's Obligations at the Closing. The obligations of the Purchaser to purchase Shares at the Closing are subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

4.1. Representations and Warranties. The representations and warranties of the Company contained in Section 2 shall be true and correct in all respects as of the Closing.

4.2. Performance. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by the Company on or before the Closing.

4.3. Compliance Certificate. If the date of the Closing is after the date of this Agreement, the President of the Company shall deliver to the Purchaser at the Closing a certificate certifying that the conditions specified in Subsections 4.1 and 4.2 have been fulfilled.

4.4. Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be obtained and effective as of the Closing.

4.5. Opinion of Counsel. The Purchaser shall have received from counsel for the Company an opinion, dated as of the Closing, in form and substance satisfactory to the Purchaser.

4.6. Board of Directors. As of the Closing, the authorized size of the Board shall be eight (8) directors, and the Board shall be comprised of Noubar B. Afeyan, Greg Behar, David A. Berry, Werner Cautreels, Peter Barton Hutt, Richard N. Kender, Lorence H. Kim and Roger J. Pomerantz.

4.7. Investors' Rights Agreement. The Company shall have executed and delivered the Investors' Rights Agreement.

4.8. Voting Agreement. The Company shall have executed and delivered the Voting Agreement.

4.9. Restated Certificate. The Company shall have filed the Restated Certificate with the Secretary of State of Delaware on or prior to the Closing, which shall continue to be in full force and effect as of the Closing.

4.10. Secretary's Certificate. The Secretary or Assistant Secretary of the Company shall have delivered to the Purchaser at the Closing a certificate certifying (i) the Bylaws of the Company, (ii) resolutions of the Board approving the Transaction Agreements and the transactions contemplated under the Transaction Agreements and (iii) resolutions of the stockholders of the Company approving the Restated Certificate.

4.11. Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the Closing and all documents incident thereto shall be reasonably satisfactory in form and substance to the Purchaser, and the Purchaser (or its counsel) shall have received all such counterpart original and certified or other copies of such documents as reasonably requested. Such documents may include good standing certificates.

5. Conditions of the Company's Obligations at the Closing. The obligations of the Company to sell Shares to the Purchaser at the Closing are subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

5.1. Representations and Warranties. The representations and warranties of the Purchaser contained in Section 3 shall be true and correct in all respects as of the Closing.

5.2. Performance. The Purchaser shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

5.3. Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be obtained and effective as of the Closing.

5.4. Investors' Rights Agreement. The Purchaser shall have executed and delivered the Investors' Rights Agreement.

5.5. Voting Agreement. The Purchaser shall have executed and delivered the Voting Agreement.

6. Right of First Refusal.

6.1. Grant. Subject to the terms of Subsections 6.6, 6.7 and 6.10 below, the Purchaser hereby unconditionally and irrevocably grants to the Company a Right of First Refusal to purchase all of the Transfer Stock that the Purchaser may propose to transfer in a Proposed Purchaser Transfer, at the same price and on the same terms and conditions, subject to Subsection 6.3, as those offered to the Prospective Transferee.

6.2. Notice. If the Purchaser proposes to make a Proposed Purchaser Transfer, the Purchaser must deliver a Proposed Transfer Notice to the Company prior to the consummation of such Proposed Purchaser Transfer. To exercise its Right of First Refusal under this Section 6, the Company must deliver a Company Notice to the Purchaser within fifteen (15) days after delivery of the Proposed Transfer Notice (the “**Consideration Period**”). In the event that, prior to the expiration of the Consideration Period, the Company waives in writing in accordance with Subsection 9.8 hereof its right to exercise its Right of First Refusal under this Section 6 or does not deliver a Company Notice to the Purchaser, then the Purchaser shall be entitled to consummate such Proposed Purchaser Transfer. For the avoidance of doubt, the Purchaser shall not consummate the purchase and sale of Transfer Stock with any third party in connection with any Proposed Purchaser Transfer prior to or during the Consideration Period (unless, for the avoidance of doubt, the Company waives in writing in accordance with Subsection 9.8 hereof its right to exercise its Right of First Refusal under this Section 6 during the Consideration Period).

6.3. Consideration; Closing. If the consideration proposed to be paid for the Transfer Stock is in property, services or other non-cash consideration, the fair market value of the consideration shall be as determined in good faith by the Board and as set forth in the Company Notice; provided, however, that if the Purchaser disagrees with such determination by the Board, the Purchaser shall have the right, at its sole cost and expense, to have the fair market value of such consideration determined by an independent appraiser of national reputation that is reasonably acceptable to the Board, in which case the fair market value thereof shall be the higher of the amount determined by the Board or such independent appraiser. If the Company cannot for any reason pay for the Transfer Stock in the same form of non-cash consideration, the Company may pay the cash value equivalent thereof, as determined in accordance with the immediately preceding sentence. The closing of the purchase of Transfer Stock by the Company shall take place, and all payments from the Company shall have been delivered to the Purchaser, by the later of (i) the date specified in the Proposed Transfer Notice as the intended closing date of the Proposed Purchaser Transfer and (ii) thirty (30) days after the expiration of the Consideration Period.

6.4. Transfer Void; Equitable Relief. Any Proposed Purchaser Transfer not made in compliance with the requirements of this Section 6 shall be null and void *ab initio*, shall not be recorded on the books of the Company or its transfer agent and shall not be recognized by the Company. The Purchaser acknowledges and agrees that any breach of this Section 6 would result in substantial harm to the Company for which monetary damages alone could not adequately compensate. Therefore, the Purchaser unconditionally and irrevocably agrees that the Company shall be entitled to seek protective orders, injunctive relief and other remedies available at law or in equity (including, without limitation, seeking specific performance or the rescission of purchases, sales and other transfers of Transfer Stock not made in strict compliance with this Section 6).

6.5. Violation of First Refusal Right. If the Purchaser becomes obligated to sell any Transfer Stock to the Company under this Section 6 and fails to deliver such Transfer Stock in accordance with the terms of this Section 6, the Company may, at its option, in addition to all other remedies it may have, send to the Purchaser the purchase price for such Transfer Stock as is herein specified and transfer to the name of the Company on the Company’s books the certificate or certificates representing the Transfer Stock to be sold.

6.6. Exempted Transfers. Notwithstanding the foregoing or anything to the contrary herein, the provisions of this Section 6 shall not apply upon a transfer by the Purchaser to any of its Affiliates; provided that such shares of Transfer Stock shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such issuance, deliver a counterpart signature page to this Agreement as confirmation that such transferee shall be bound by all the terms and conditions of this Agreement as a Purchaser (but only with respect to the securities so transferred to the transferee), including the obligations of the Purchaser with respect to Proposed Purchaser Transfers of such Transfer Stock pursuant to this Section 6. For the avoidance of doubt, the Purchaser shall not transfer any shares of Transfer Stock to an Affiliate for the purposes of circumventing the Company's rights under this Section 6.

6.7. Deemed Liquidation Event. Notwithstanding the foregoing or anything to the contrary herein, the provisions of this Section 6 shall not apply to the sale of any Transfer Stock pursuant to a Deemed Liquidation Event (as defined in the Restated Certificate) that has been approved by the Board.

6.8. Prohibited Transferees. Notwithstanding the foregoing, the Purchaser shall not assign, sell, offer to sell, pledge, mortgage, hypothecate, dispose of or otherwise transfer or encumber any Transfer Stock (or any interest therein) to any entity which, in the determination of the Board, is directly or indirectly engaged in the research, development and/or commercialization of microbiome therapeutics.

6.9. Legend. Each certificate representing shares of Transfer Stock held by the Purchaser or issued to any permitted transferee in connection with a transfer permitted by Subsection 6.6 hereof shall be endorsed with the following legend:

THE SALE, PLEDGE, HYPOTHECATION OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO, AND IN CERTAIN CASES PROHIBITED BY, THE TERMS AND CONDITIONS OF A RIGHT OF FIRST REFUSAL SET FORTH IN A CERTAIN SERIES D PREFERRED STOCK PURCHASE AGREEMENT BY AND BETWEEN THE STOCKHOLDER AND THE CORPORATION. COPIES OF SUCH AGREEMENT MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE CORPORATION.

The Purchaser agrees that the Company may instruct its transfer agent to impose transfer restrictions on the shares represented by certificates bearing the legend referred to in this Subsection 6.9 above to enforce the provisions of this Agreement, and the Company agrees to promptly do so. The Company shall remove such legend upon the termination of this Section 6 at the request of the holder by causing replacement certificate or certificates to be issued to such holder that do not contain such legend.

6.10. Termination of Rights. The covenants set forth in Section 6 shall terminate and be of no further force or effect (i) upon the consummation of the IPO or (ii) on the third anniversary of the Closing Date, whichever occurs first.

7. HSR Filing. The Company and the Purchaser shall cooperate with each other and use their commercially reasonable efforts to make, as soon as reasonably practical after the date hereof but no later than December 29, 2014, all necessary filings and submissions that may be required under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the “**HSR Act**”) to cause a Series D-1 Triggering Event (as defined in the Restated Certificate) to occur with respect to the shares of Series D-1 Preferred Stock owned by the Purchaser. Each of the parties hereto agrees to use its commercially reasonable efforts to furnish or cause to be furnished, as promptly as practicable, all information and documents requested with respect to the HSR Act and shall otherwise cooperate with the applicable governmental body in order to comply with the HSR Act and cause a Series D-1 Triggering Event to occur in as expeditious a manner as possible. Each of the parties hereto shall consult, and share drafts of any filings or communications, a reasonable period of time in advance with respect to and consider in good faith the comments and views of the other party in connection with any filing, communication, defense, litigation, negotiation or strategy and any final decisions with respect thereto in each case relating to the HSR Act or any antitrust or unfair competition law regarding any of the transactions contemplated hereby, to the extent reasonably practicable and to the extent permitted by applicable law, and shall give the other party and its Representatives a reasonable advance opportunity to attend and participate in any in-person or telephonic meeting or conference with any governmental authority or, in connection with any litigation by a private party, relating to the HSR Act or any antitrust or unfair competition law regarding any of the transactions contemplated hereby, and shall provide concurrent copies to the other party of any material written communications or filings with respect thereto. Each of the parties hereto shall use commercially reasonable efforts to resolve such objections, if any, as any governmental body may assert with respect to this Agreement and the transactions contemplated hereby (including, without limitation, with respect to the Purchaser’s acquisition of additional voting securities of the Company) in connection with the HSR Act or any antitrust or unfair competition law in order to cause a Series D-1 Triggering Event to occur with respect to the shares of Series D-1 Preferred Stock held by the Purchaser. In the event that a suit is instituted by a person or governmental body challenging this Agreement and the transactions contemplated hereby as violative of the HSR Act or any antitrust or unfair competition law, each of the parties shall use commercially reasonable efforts to resist or resolve such suit. Each party shall, upon request by any other party, furnish the other parties with all information concerning itself, its subsidiaries, directors, officers and stockholders and such other matters as may reasonably be necessary or advisable in connection with any statement, filing, ruling request, notice or application made by or on behalf of the parties or any of their respective subsidiaries to any third party and/or any governmental body with respect to the HSR Act or any antitrust or unfair competition law. Notwithstanding anything in this Section 7 or this Agreement to the contrary, nothing in this Section 7 or this Agreement shall require, or be deemed to require, the Company or the Purchaser (a) to propose, negotiate, offer to, commit to or effect any sale, divestiture, or disposition of assets or businesses, or licenses or (b) to agree to hold separate any assets or agree to any similar arrangements or to commit to restrict the dominion or control of its business or to conduct its business in a specified manner.

8. Standstill.

8.1. Until the earlier of (i) the fifth anniversary of the Closing Date or (ii) the third anniversary of the consummation of the IPO, unless approved in advance in writing by the Board, the Purchaser agrees that neither the Purchaser nor any of its Affiliates or Representatives acting on behalf of or in concert with the Purchaser (or any of its Affiliates or Representatives) will in any manner, directly or indirectly:

(a) effect or seek, offer or propose (whether publicly or otherwise) to effect, or cause or participate in or in any way advise, assist or encourage any other person to effect or seek, offer or propose (whether publicly or otherwise) to effect or participate in, (i) any acquisition of any of the Company's convertible debt securities, equity securities or assets, or rights or options to acquire interests in or beneficially own any of the Company's convertible debt securities, equity securities or assets, other than from the underwriters in connection with the IPO, (ii) any business combination, merger, tender offer, exchange offer or similar transaction involving the Company or any of its subsidiaries, (iii) any restructuring, recapitalization, liquidation, dissolution or similar transaction involving the Company or any of its subsidiaries, (iv) make any statement or proposal to the board of directors of any of the Company, any of the Company's Affiliates or Representatives or any of the Company's stockholders regarding, or make any public announcement, proposal or offer (including "proxies" as such terms are used in the rules of the Securities and Exchange Commission) with respect to, or otherwise solicit, seek or offer to effect (including, for the avoidance of doubt, indirectly by means of communication with the press or media) any proposal to seek representation on the Board or otherwise seek to control or influence the management, the Board or policies of any of the Company, or (v) any proposal, arrangement or other statement that is inconsistent with the terms of this Agreement, including, without limitation, this Subsection 8.1(a);

(b) instigate, encourage or assist any third party (including, without limitation, forming a "group", as defined under applicable federal and state securities laws, with any such third party) to do, or enter into any discussions or agreements with any third party with respect to, any of the securities of the Company or the actions set forth in Subsection 8.1(a) above;

(c) otherwise act, alone or in concert with others, to seek control or influence the management, the Board or the policies of the Company;

(d) take any action which would reasonably be expected to require the Company or any of its Affiliates to make a public announcement regarding any of the types of actions or matters set forth in Subsection 8.1(a) above; or

(e) have any discussions or enter into any arrangements, understandings or agreements (whether written or oral) with, or advise, assist or encourage, any other persons in connection with any of the foregoing.

Subject to the last sentence of Subsection 8.2, the Purchaser also agrees not to request that the Company, directly or indirectly, terminate or amend or waive any provision of this Section 8 (including, without limitation, this sentence).

8.2. The restrictions set forth in Subsection 8.1 shall terminate and be of no further force and effect upon (i) the Company publicly announcing that it has entered into, may enter into or shall enter into, a definitive agreement for a transaction involving the purchase of a majority of the voting power of the Company's equity securities or all or substantially all of the Company's assets (whether by merger, consolidation, business combination, tender or exchange offer, recapitalization, restructuring, sale, equity issuance or otherwise) or (ii) the Company publicly announcing the submission of a bona fide offer or public attempt by a third party to enter into a transaction involving the purchase of a majority of the voting power of the Company's equity securities or all or substantially all of the Company's assets (whether by merger, consolidation, business combination, tender or exchange offer, recapitalization, restructuring, sale, equity issuance or otherwise); provided, however, that occurrence of any of the events set forth above in clauses (i) and (ii) of this Subsection 8.2 shall not cause the restrictions set forth Subsection 8.1 to terminate unless, and until such time as, none of the directors, officers or employees of the Purchaser or any of its Affiliates is a member of the Board. The restrictions set forth in Subsection 8.1(a) shall not prevent the Purchaser from making a proposal regarding a possible transaction described in Subsection 8.1(a) directly to the Board on a confidential basis if such proposal does not require the Company to make a public announcement regarding this Agreement, a possible transaction or any of the matters described in Subsection 8.1. The restrictions set forth in Subsection 8.1 shall not apply to or preclude any licensing arrangement or an asset transfer of a similar nature between the Company or any of its Affiliates, on the one hand, and the Purchaser or any of its Affiliates, on the other hand; provided, however, that (a) if the Purchaser or any of its Affiliates makes a proposal to the Company or any of its Affiliates with respect to any such arrangement or transfer, (i) as a condition hereto, the Purchaser or its applicable Affiliate shall deliver written notice to the Company that such proposal is being made pursuant to this sentence and is therefore not subject to the restrictions set forth in Subsection 8.1 and (ii) such proposal shall be made on a confidential basis; (b) neither the Purchaser nor any of its Affiliates shall use the exceptions set forth in this sentence for the purposes of circumventing the restrictions set forth in Subsection 8.1; and (c) any such arrangement or transfer shall be negotiated by the parties thereto on a confidential basis.

8.3. No failure or delay by the Company in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder.

8.4. For purposes of this Section 8, the term "Representative" shall not include, or be deemed to include for any purpose, any director, officer or employee of the Purchaser or any of its Affiliates who is a member of the Board (including any individual designated by the Purchaser to serve on the Board pursuant to Subsection 1.2(c) of the Voting Agreement) when such person is acting in his or her capacity as a member of the Board and not on behalf of the Purchaser or any of its Affiliates.

9. Miscellaneous.

9.1. Survival of Warranties and Covenants. Unless otherwise set forth in this Agreement, the representations, warranties and covenants of the Company and the Purchaser contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the Purchaser or the Company.

9.2. Successors and Assigns. This Agreement, and the rights and obligations of the Purchaser hereunder, may be assigned by the Purchaser to (a) any person or entity to which Shares, the shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock or the Common Stock issued upon exercise of the Shares or the shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock are transferred by the Purchaser, or (b) to any to any Affiliate, partner, member, stockholder or subsidiary of the Purchaser, and, in each case, such transferee shall be deemed a "Purchaser" for purposes of this Agreement; provided that each such assignment of rights shall be contingent upon the transferee providing a written instrument to the Company notifying the Company of such transfer and assignment and agreeing in writing to be bound by the terms of this Agreement. The Purchaser shall cause any proposed purchaser, pledgee or transferee of Shares, the shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock or the Common Stock issued upon exercise of the Shares or the shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. The Company may not assign its rights under this Agreement.

9.3. Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts, without regard to conflict of law principles that would result in the application of any law other than the law of the Commonwealth of Massachusetts.

9.4. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

9.5. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

9.6. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day

after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on the signature pages hereto, or to such facsimile number or address as subsequently modified by written notice given in accordance with this Subsection 9.6. If notice is given to the Company, a copy shall also be given to Latham & Watkins LLP, John Hancock Tower, 27th Floor, 200 Clarendon Street, Boston, MA 02116, Attention Peter N. Handrinos, Facsimile Number: (617) 948-6060, and if notice is given to the Purchaser, a copy shall also be given to Mayer Brown LLP, 1675 Broadway, New York, NY 10019, Attention: David A. Carpenter, Facsimile Number: (212) 849-5795.

9.7. No Finder's Fees. Each party represents that it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. The Purchaser agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finder's or broker's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which the Purchaser or any of its officers, employees, or representatives is responsible. The Company agrees to indemnify and hold harmless the Purchaser from any liability for any commission or compensation in the nature of a finder's or broker's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

9.8. Amendments and Waivers. Any term of this Agreement may be amended, terminated or waived only with the written consent of the Company and the Purchaser. Any amendment or waiver effected in accordance with this Subsection 9.8 shall be binding upon the Purchaser and each transferee of the Shares (or the Common Stock issuable upon conversion thereof, the Series D Preferred Stock issuable upon conversion thereof or the Common Stock issuable upon conversion of the Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock), each future holder of all such securities, and the Company.

9.9. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

9.10. Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

9.11. Entire Agreement. This Agreement (including the Exhibits hereto), the Restated Certificate and the other Transaction Agreements constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled.

9.12. No Promotion. The Company agrees that it will not, and shall cause each of its subsidiaries to not, without the prior written consent of the Purchaser, use in advertising, publicity, or otherwise the name of the Purchaser, nor any trade name, trademark, trade device, service mark, symbol or any abbreviation, contraction or simulation thereof owned by the Purchaser or any of its Affiliates. The Company further agrees that it shall obtain the written consent of the Purchaser, which shall not be unreasonably withheld, prior to the Company's issuance of any public statement detailing the purchase of Shares by the Purchaser pursuant to this Agreement. Anything herein to the contrary notwithstanding, this Subsection 9.12 shall not be amended without the prior written consent of the Purchaser. Notwithstanding the foregoing, this Agreement and any other agreement to which the Company and the Purchaser is a party may be filed by the Company with the Securities and Exchange Commission.

9.13. Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the Commonwealth of Massachusetts and to the jurisdiction of the United States District Court for the District of Massachusetts for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of the Commonwealth of Massachusetts or the United States District Court for the District of Massachusetts, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

[the next page is the signature page]

IN WITNESS WHEREOF, the parties have executed this Series D Preferred Stock Purchase Agreement as of the date first written above.

COMPANY:

SERES HEALTH, INC.

By: /s/ Roger J. Pomerantz

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

Address:

161 First Street, Suite 2C

Cambridge, MA 02142

Facsimile Number: 617-945-0268

PURCHASER:

NESTLÉ HEALTH SCIENCE US HOLDINGS, INC.

By: /s/ Andrew Glass

Name: Andrew Glass

Title: Asst. Sec.

Address:

Nestlé Health Science US Holdings, Inc.

900 Long Ridge Road, Building 2

Stamford, CT 06902

Attention: Andrew Glass, Esq.

Facsimile Number: 480-379-5510

With a copy (which shall not constitute notice) to:

Nestlé Health Science S.A.

Avenue Nestlé, 55

1800 Vevey

Switzerland

Attention: General Counsel

Facsimile Number: 41.21.927.2875

SIGNATURE PAGE TO SERIES D PREFERRED STOCK PURCHASE AGREEMENT

EXHIBIT A

FORM OF AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
SERES HEALTH, INC.

(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

Seres Health, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**General Corporation Law**”),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Seres Health, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on October 18, 2010 under the name Newco LS21, Inc.

2. That the Board of Directors of this corporation duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Seres Health, Inc. (the “**Corporation**”).

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle 19801. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 62,348,003 shares, consisting of (i) 38,000,000 shares of Common Stock, \$0.001 par value per share (“**Common Stock**”), and (ii) 24,348,003 shares of Preferred Stock, \$0.001 par value per share (“**Preferred Stock**”), of which 8,230,997 shares are hereby designated “**Series A Preferred Stock**,” 2,339,319 shares are hereby designated “**Series A-2 Preferred Stock**,” 4,831,359 shares are hereby designated “**Series B Preferred Stock**,” 3,946,328 shares are hereby designated “**Series C Preferred Stock**,” 3,611,111 shares are hereby designated “**Series D Preferred Stock**” and 1,388,889 shares are hereby designated “**Series D-1 Preferred Stock**.”

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

The Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series D-1 Preferred Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "Sections" or "Subsections" in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

1. Dividends.

From and after the date of the issuance of any shares of Series A Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series A Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series A Preferred Stock (the "**Series A Accruing Dividends**"). From and after the date of the issuance of any shares of Series A-2 Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series A-2 Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series A-2 Preferred Stock (the "**Series A-2 Accruing Dividends**"). From and after the date of the issuance of any shares of Series B Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series B Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series B Preferred Stock (the "**Series B**").

Accruing Dividends”). From and after the date of the issuance of any shares of Series C Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series C Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series C Preferred Stock (the “**Series C Accruing Dividends**”). From and after the date of the issuance of any shares of Series D Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series D Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series D Preferred Stock (the “**Series D Accruing Dividends**”). From and after the date of the issuance of any shares of Series D-1 Preferred Stock, dividends at the rate per annum of eight percent (8%) of the Series D-1 Original Purchase Price (as defined below) per share plus the amount of previously accrued dividends shall accrue on such shares of Series D-1 Preferred Stock (the “**Series D-1 Accruing Dividends**” and, together with the Series A Accruing Dividends, the Series A-2 Accruing Dividends, the Series B Accruing Dividends, the Series C Accruing Dividends and the Series D Accruing Dividends, the “**Accruing Dividends**”). Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided however, that except as set forth in the following sentence of this **Section 1** or in **Subsection 2.1**, such Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of the applicable series of Preferred Stock in an amount at least equal to the greater of (i) the amount of the aggregate Series A Accruing Dividends, Series A-2 Accruing Dividends, Series B Accruing Dividends, Series C Accruing Dividends, Series D Accruing Dividends or Series D-1 Accruing Dividends, as the case may be, then accrued on the shares of the applicable series of Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of the applicable series of Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of the applicable series of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of the applicable series of Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A Original Issue Price (as defined below), Series A-2 Original Issue Price (as defined below), Series B Original Issue Price (as defined below), Series C Original Issue Price (as defined below), Series D Original Issue Price (as defined below) or Series D-1 Original Issue Price (as defined below), as applicable; provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of

Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Preferred Stock dividend. The “**Series A Original Issue Price**” shall mean \$0.79 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock. The “**Series A-2 Original Issue Price**” shall mean \$1.78 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-2 Preferred Stock. The “**Series B Original Issue Price**” shall mean \$2.20 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock. The “**Series C Original Issue Price**” shall mean \$12.1632 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series C Preferred Stock. The “**Series D Original Issue Price**” shall mean \$18.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock. The “**Series D-1 Original Issue Price**” shall mean \$18.00 per share, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D-1 Preferred Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event (as defined below), the holders of shares of Preferred Stock then outstanding shall be entitled to be paid, on a pari passu basis, out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to (i) in the case of the Series A Preferred Stock, the greater of (A) the Series A Original Issue Price, plus any Series A Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (i) is hereinafter referred to as the “**Series A Liquidation Amount**”), (ii) in the case of the Series A-2 Preferred Stock, the greater of (A) the Series A-2 Original Issue Price, plus any Series A-2 Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (ii) is hereinafter referred to as the “**Series A-2 Liquidation Amount**”), (iii) in the case of the Series B Preferred Stock, the greater of (A) the Series B Original Issue Price, plus any Series B Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event

(the amount payable pursuant to this clause (iii) is hereinafter referred to as the “**Series B Liquidation Amount**”), (iv) in the case of the Series C Preferred Stock, the greater of (A) the Series C Original Issue Price, plus any Series C Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (iv) is hereinafter referred to as the “**Series C Liquidation Amount**”), (v) in the case of the Series D Preferred Stock, the greater of (A) the Series D Original Issue Price, plus any Series D Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (v) is hereinafter referred to as the “**Series D Liquidation Amount**”) and (vi) in the case of the Series D-1 Preferred Stock, the greater of (A) the Series D-1 Original Issue Price, plus any Series D-1 Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, and (B) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this clause (vi) is hereinafter referred to as the “**Series D-1 Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “**Deemed Liquidation Event**” unless (i) the holders of shares of Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of Preferred Stock, voting together as a separate class, and (ii) the holders of a majority of the then outstanding shares of Series C Preferred Stock, voting as a separate class, elect otherwise by written notice sent to the Corporation at least ten (10) days prior to the effective date of any such event:

(a) a merger or consolidation in which

(i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation (provided that, for the purpose of this Subsection 2.3.1, all shares of Common Stock issuable upon exercise of Options (as defined below) outstanding immediately prior to such merger or consolidation or upon conversion of Convertible Securities (as defined below) outstanding immediately prior to such merger or consolidation shall be deemed to be outstanding immediately prior to such merger or consolidation and, if applicable, converted or exchanged in such merger or consolidation on the same terms as the actual outstanding shares of Common Stock are converted or exchanged); or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within 90 days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (ii) if the holders of shares of Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of Preferred Stock so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall

use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders (the “**Available Proceeds**”), to the extent legally available therefor, on the 150th day after such Deemed Liquidation Event (the “**Redemption Date**”), to redeem all outstanding shares of Preferred Stock at a price per share equal to, in the case of the Series A Preferred Stock, the Series A Liquidation Amount, in the case of the Series A-2 Preferred Stock, the Series A-2 Liquidation Amount, in the case of the Series B Preferred Stock, the Series B Liquidation Amount, in the case of the Series C Preferred Stock, the Series C Liquidation Amount, in the case of the Series D Preferred Stock, the Series D Liquidation Amount, and, in the case of the Series D-1 Preferred Stock, the Series D-1 Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall redeem a pro rata portion of each holder’s shares of Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefor. The Corporation shall send written notice of the mandatory redemption (the “**Redemption Notice**”) to each holder of record of Preferred Stock not less than 40 days prior to the Redemption Date. The Redemption Notice shall state: (1) the number of shares of each series of Preferred Stock held by the holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice; (2) the Redemption Date, the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and the Series D-1 Liquidation Amount; (3) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Subsection 4.1); and (4) that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Preferred Stock to be redeemed. On or before the Redemption Date, each holder of shares of Preferred Stock to be redeemed on the Redemption Date, unless, if applicable, such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and/or the Series D-1 Liquidation Amount, as the case may be, for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Preferred Stock represented by a certificate are redeemed, a new certificate representing the unredeemed shares of Preferred Stock shall promptly be issued to such holder. If the Redemption Notice shall have been duly given, and if on the Redemption Date the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and/or the Series D-1 Liquidation Amount, as the case may be,

payable upon redemption of the shares of Preferred Stock to be redeemed on the Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that the certificates evidencing any of the shares of Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Preferred Stock shall cease to accrue after the Redemption Date and all rights with respect to such shares shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Series A Liquidation Amount, the Series A-2 Liquidation Amount, the Series B Liquidation Amount, the Series C Liquidation Amount, the Series D Liquidation Amount and/or the Series D-1 Liquidation Amount, as the case may be, without interest upon surrender of their certificate or certificates therefor. Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director (as defined below).

2.3.4 Allocation of Escrow. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class. Notwithstanding the foregoing, the holders of shares of Series D-1 Preferred Stock shall not be entitled to vote for the election of any director of the Corporation.

3.2 Election of Directors. The holders of record of the shares of Series A Preferred Stock, Series B Preferred Stock and/or Series C Preferred Stock (together, the “**ABC Preferred Stock**”), exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the “**Preferred Stock Director**”) and the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of ABC Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the ABC Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock (together, the “**Voting Preferred Stock**”) other than the Series D-1 Preferred Stock, exclusively and voting together as a single class (on an as-converted to Common Stock basis), shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

3.3 Preferred Stock Protective Provisions. At any time when shares of ABC Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of ABC Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation;

3.3.3 create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase or decrease the authorized number of shares of Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock or Series C Preferred Stock or increase the authorized number of shares of any additional class or series of capital stock unless the same ranks junior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

3.3.4 (i) reclassify, alter or amend any existing security of the Corporation that is pari passu with the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock in respect of any such right, preference or privilege;

3.3.5 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof;

3.3.6 create, or authorize the creation of, or issue, or authorize the issuance of, any debt security or permit any subsidiary to take any such action with respect to any debt security unless such debt security has received the prior approval of the Board of Directors, including the approval of the Preferred Stock Director;

3.3.7 create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary; or

3.3.8 increase or decrease the authorized number of directors constituting the Board of Directors.

3.4 Series C Preferred Stock Protective Provisions. At any time when shares of Series C Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of Series C Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.4.1 amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or privileges of the Series C Preferred Stock;

3.4.2 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof;

3.4.3 (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series C Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series C Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series C Preferred Stock in respect of any such right, preference or privilege; or

3.4.4 increase or decrease the authorized number of shares of Series C Preferred Stock.

3.5 Series D Preferred Stock Protective Provisions. At any time when shares of Series D Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of Series D Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.5.1 amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or privileges of the Series D Preferred Stock;

3.5.2 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof and (iv) purchases or redemptions of Series D Preferred Stock or Series D-1 Preferred Stock by the Corporation pursuant to Section 6 of that certain Series D Stock Purchase Agreement, dated on or about December 19, 2014, by and between the Corporation and the investor named therein;

3.5.3 (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series D Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series D Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series D Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series D Preferred Stock in respect of any such right, preference or privilege; or

3.5.4 increase or decrease the authorized number of shares of Series D Preferred Stock.

3.6 Series D-1 Preferred Stock Protective Provisions. At any time when shares of Series D-1 Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of Series D-1 Preferred Stock given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.6.1 amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely affects the powers, preferences or privileges of the Series D-1 Preferred Stock;

3.6.2 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price and the then-current fair market value thereof and (iv) purchases or redemptions of Series D Preferred Stock or Series D-1 Preferred Stock by the Corporation pursuant to Section 6 of that certain Series D Stock Purchase Agreement, dated on or about December 19, 2014, by and between the Corporation and the investor named therein;

3.6.3 (i) reclassify, alter or amend any existing security of the Corporation that is pari passu with the Series D-1 Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series D-1 Preferred Stock in respect of any such right, preference or privilege, or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series D-1 Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with the Series D-1 Preferred Stock in respect of any such right, preference or privilege; or

3.6.4 increase or decrease the authorized number of shares of Series D-1 Preferred Stock.

4. Optional Conversion.

The holders of the Voting Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

4.1 Right to Convert.

4.1.1 Conversion Ratios.

(a) Each share of Series A Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and

nonassessable shares of Common Stock as is determined by dividing the Series A Original Issue Price by the Series A Conversion Price (as defined below) in effect at the time of conversion. The “**Series A Conversion Price**” shall initially be equal to \$0.79. Such initial Series A Conversion Price, and the rate at which shares of Series A Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(b) Each share of Series A-2 Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series A-2 Original Issue Price by the Series A-2 Conversion Price (as defined below) in effect at the time of conversion. The “**Series A-2 Conversion Price**” shall initially be equal to \$1.78. Such initial Series A-2 Conversion Price, and the rate at which shares of Series A-2 Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(c) Each share of Series B Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below) in effect at the time of conversion. The “**Series B Conversion Price**” shall initially be equal to \$2.20. Such initial Series B Conversion Price, and the rate at which shares of Series B Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(d) Each share of Series C Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series C Original Issue Price by the Series C Conversion Price (as defined below) in effect at the time of conversion. The “**Series C Conversion Price**” shall initially be equal to \$12.1632. Such initial Series C Conversion Price, and the rate at which shares of Series C Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(e) Each share of Series D Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing \$12.1632 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series D Preferred Stock) by the Series D Conversion Price (as defined below) in effect at the time of conversion. The “**Series D Conversion Price**” shall initially be equal to \$12.1632. Such initial Series D Conversion Price, and the rate at which shares of Series D Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

(f) Shares of Series D-1 Preferred Stock shall not be convertible at the option of the holder thereof.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Voting Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Voting Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Voting Preferred Stock to voluntarily convert shares of Voting Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Voting Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Voting Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of Voting Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Voting Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Voting Preferred Stock converted.

4.3.2 Reservation of Shares of Common Stock. The Corporation shall at all times when shares of Voting Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Voting Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Voting Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Voting Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock or the Series D Preferred Stock, as the case may be, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Series A Conversion Price, Series A-2 Conversion Price, Series B Conversion Price, Series C Conversion Price or Series D Conversion Price.

4.3.3 Reservation of Shares of Series D Preferred Stock. The Corporation shall at all times when shares of Series D-1 Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series D-1 Preferred Stock, such number of its duly authorized shares of Series D Preferred Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Series D-1 Preferred Stock; and if at any time the number of authorized but unissued shares of Series D Preferred Stock shall not be sufficient to effect the conversion of all then outstanding shares of Series D-1 Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Series D Preferred Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation.

4.3.4 Effect of Conversion. All shares of Voting Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Voting Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Voting Preferred Stock and of such series of Voting Preferred Stock accordingly.

4.3.5 No Further Adjustment. Upon any such conversion, no adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price shall be made for any declared but unpaid dividends on the Series A Preferred Stock, the Series A-2 Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock or the Series D Preferred Stock, as the case may be, surrendered for conversion or on the Common Stock delivered upon conversion. No adjustment shall be made to the number of shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock into Series D Preferred Stock for any declared but unpaid dividends on the Series D-1 Preferred Stock that is converted into Series D Preferred Stock.

4.3.6 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Voting Preferred Stock pursuant to this Section 4 or shares of Series D Preferred Stock upon conversion of shares of Series D-1 Preferred Stock pursuant to Section 5. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock or Series D Preferred Stock, as the case may be, in a name other than that in which the shares of Voting Preferred Stock or Series D-1 Preferred Stock, as the case may be, so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) “**Series D Original Issue Date**” shall mean the date on which the first share of Series D Preferred Stock was issued.

(c) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) “**Additional Shares of Common Stock**” shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series D Original Issue Date and assuming, for this purpose, that all issued and outstanding shares of Series D-1 Preferred Stock have been converted into Series D Preferred Stock pursuant to Subsection 5.1.3 on the Series D Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, “**Exempted Securities**”):

- (i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;

- (ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8;
- (iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation, including the Preferred Stock Director;
- (iv) shares of Common Stock issued in connection with the listing of the Common Stock on a National Securities Exchange (as defined in Subsection 5.1.1(a));
- (v) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;
- (vi) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Corporation, including the Preferred Stock Director;
- (vii) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation, including the Preferred Stock Director;

- (viii) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Corporation, including the Preferred Stock Director; or
- (ix) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation, including the Preferred Stock Director.

4.4.2 No Adjustment of Conversion Price. No adjustment in the Series A Conversion Price, the Series A-2 Conversion Price or the Series B Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of shares of Series A Preferred Stock, Series A-2 Preferred Stock and Series B Preferred Stock representing at least sixty percent (60%) of the voting power of the then outstanding shares of Series A Preferred Stock, Series A-2 Preferred Stock and Series B Preferred Stock, voting together as a separate class, agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series C Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series C Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series D Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series D Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series D Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities and

shares of Series D Preferred Stock issued upon conversion of the Series D-1 Preferred Stock pursuant to Subsection 5.1.3) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be, computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series A Conversion Price, Series A-2 Conversion Price, Series B Conversion Price, Series C Conversion Price or Series D Conversion Price as would have been obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price to an amount which exceeds the lower of (i) the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be, in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security and (ii) the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be, that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D

Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be, then in effect, or because such Option or Convertible Security was issued before the Series D Original Issue Date), are revised after the Series D Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price pursuant to the terms of Subsection 4.4.4, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, shall be readjusted to such Series A Conversion Price, Series A-2 Conversion Price, Series B Conversion Price, Series C Conversion Price or Series D Conversion Price, as the case may be, as would have been obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or

amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series D Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, each as in effect immediately prior to such issue, then the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP₂" shall mean (1) in the case of an adjustment to the Series A Conversion Price, the Series A Conversion Price in effect immediately after such issue of Additional Shares of Common Stock, (2) in the case of an adjustment to the Series A-2 Conversion Price, the Series A-2 Conversion Price in effect immediately after such issue of Additional Shares of Common Stock, (3) in the case of an adjustment to the Series B Conversion Price, the Series B Conversion Price in effect immediately after such issue of Additional Shares of Common Stock, (4) in the case of an adjustment to the Series C Conversion Price, the Series C Conversion Price in effect immediately after such issue of Additional Shares of Common Stock and (5) in the case of an adjustment to the Series D Conversion Price, the Series D Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;

(b) "CP₁" shall mean (1) in the case of an adjustment to the Series A Conversion Price, the Series A Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock, (2) in the case of an adjustment to the Series A-2 Conversion Price, the Series A-2 Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock, (3) in the case of an adjustment to the Series B Conversion Price, the Series B Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock, (4) in the case of an adjustment to the Series C Conversion Price, the Series C Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock and (5) in the case of an adjustment to the Series D Conversion Price, the Series D Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock

(treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor and conversion of all Series D-1 Preferred Stock into Series D Preferred Stock pursuant to Subsection 5.1.3) immediately prior to such issue);

(d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and

(e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

- (i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;
- (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director; and
- (iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing

- (i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by
- (ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price pursuant to the terms of Subsection 4.4.4, and such issuance dates occur within a period of no more than 90 days from the first such issuance to the final such issuance, then, upon the final such issuance, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series D Original Issue Date effect a subdivision of the outstanding Common Stock, the Series A Conversion Price, the Series A-2 Conversion

Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, each as in effect immediately before such subdivision, shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series D Original Issue Date combine the outstanding shares of Common Stock, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, each as in effect immediately before such combination, shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series D Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, each as in effect immediately before such event, shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, as the case may be, then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price, as the case may be, shall be recomputed accordingly as of the close of business on such record date and thereafter the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and the Series D Conversion Price as the case may be, shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) no such adjustment shall be made with respect to the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price if the holders of the applicable series of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number

equal to the number of shares of Common Stock as they would have received if all outstanding shares of the applicable series of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series D Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.5, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of the applicable series of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation, including the Preferred Stock Director) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the applicable series of Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price or the Series D Conversion Price, as the case may be) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the applicable series of Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of the applicable series of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the applicable series of Preferred Stock is convertible) and showing in detail the facts

upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a certificate setting forth (i) the Series A Conversion Price, the Series A-2 Conversion Price, the Series B Conversion Price, the Series C Conversion Price and/or the Series D Conversion Price, as the case may be, then in effect and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of the applicable series of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events.

5.1.1 Upon either (a) the listing of shares of Common Stock on the New York Stock Exchange, the NYSE MKT, the NASDAQ Stock Market, the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market or any successor thereto (each a “**National Securities Exchange**”) or (b) the date and time, or the occurrence of an event, specified by vote or written consent of both (i) the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of the voting power of the then

outstanding shares of ABC Preferred Stock, voting together as a separate class, and (ii) the holders of a majority of the then outstanding shares of Series C Preferred Stock (the time of such listing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**ABC Mandatory Conversion Time**”), (A) all outstanding shares of ABC Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

5.1.2 Upon either (a) the listing of shares of Common Stock on a National Securities Exchange or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of a majority of the then outstanding shares of Series D Preferred Stock (the time of such listing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Series D Mandatory Conversion Time**”), (A) all outstanding shares of Series D Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate and (B) such shares may not be reissued by the Corporation.

5.1.3 Upon either (i) the expiration of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the “**HSR Act**”) such that a holder of Series D-1 Preferred Stock could acquire shares of Series D Preferred Stock issuable upon conversion of the Series D-1 Preferred Stock in compliance with the HSR Act or (ii) if applicable, a transfer of shares of Series D-1 Preferred Stock to a person that would not be required to make a filing under the HSR Act to acquire the shares of Series D Preferred Stock issuable upon conversion of such shares of Series D-1 Preferred Stock or the waiting period under the HSR Act applicable to such person acquiring such shares of Series D Preferred Stock has expired (either such event, a “**Series D-1 Triggering Event**”, and the date and time of such event is referred to herein as the “**Series D-1 Mandatory Conversion Time**”), each share of Series D-1 Preferred Stock held by such holder shall automatically be converted into one (1) share of Series D Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to either the Series D Preferred Stock or the Series D-1 Preferred Stock. The Corporation shall be sent written notice of any Series D-1 Triggering Event. Each holder of record of shares of Series D-1 Preferred Stock that has been or will be converted at a Series D-1 Mandatory Conversion Time shall be sent written notice of such Series D-1 Mandatory Conversion Time and the place designated for mandatory conversion of any shares of Series D-1 Preferred Stock pursuant to this Subsection 5.1.3. Such notice need not be sent in advance of the occurrence of any Series D-1 Mandatory Conversion Time. Upon receipt of such notice, a holder of shares of Series D-1 Preferred Stock converted at any Series D-1 Mandatory Conversion Time shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series D-1 Preferred Stock converted pursuant to this Subsection 5.1.3, including the rights, if

any, to receive notices and vote (other than as a holder of Series D Preferred Stock), will terminate at the applicable Series D-1 Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.1.3. As soon as practicable after a Series D-1 Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series D-1 Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Series D Preferred Stock issuable on such conversion in accordance with the provisions hereof and the payment of any declared but unpaid dividends on the shares of Series D-1 Preferred Stock converted. Such Series D-1 Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series D-1 Preferred Stock accordingly.

5.2 Mandatory Conversion Procedural Requirements.

5.2.1 All holders of record of shares of ABC Preferred Stock shall be sent written notice of the ABC Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of ABC Preferred Stock pursuant to Subsection 5.1.1. Such notice need not be sent in advance of the occurrence of the ABC Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of ABC Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the ABC Preferred Stock converted pursuant to Subsection 5.1.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the ABC Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2.1. As soon as practicable after the ABC Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for ABC Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of ABC Preferred Stock converted. Such ABC Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of each applicable series of ABC Preferred Stock accordingly.

5.2.2 All holders of record of shares of Series D Preferred Stock shall be sent written notice of the Series D Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series D Preferred Stock pursuant to Section 5.1.2. Such notice need not be sent in advance of the occurrence of the Series D Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series D Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series D Preferred Stock converted pursuant to Subsection 5.1.2, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Series D Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2.2. As soon as practicable after the Series D Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series D Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series D Preferred Stock converted. Such Series D Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series D Preferred Stock accordingly.

6. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

7. Waiver. Unless a different vote is specified in the Certificate of Incorporation, any of the rights, powers, preferences and other terms of the ABC Preferred Stock set forth herein may be waived, either prospectively or retrospectively, on behalf of all holders of ABC Preferred Stock by the affirmative written consent or vote of the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of the voting power of the shares of ABC Preferred Stock then outstanding. Unless a different vote is specified in the Certificate of

Incorporation, any of the rights, powers, preferences and other terms of any series of Preferred Stock set forth herein may be waived, either prospectively or retrospectively, on behalf of all holders of such series of Preferred Stock by the affirmative written consent or vote of the holders of a majority of the shares of such series of Preferred Stock then outstanding.

8. **Notices.** Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “**Excluded Opportunity**” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, (i) any

director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, “**Covered Persons**”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a director of the Corporation.

ELEVENTH: The following indemnification provisions shall apply to the persons enumerated below.

1. Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an “**Indemnified Person**”) who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “**Proceeding**”), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys’ fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article Eleventh, the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board of Directors.

2. Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys’ fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article Eleventh or otherwise.

3. Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this Article Eleventh is not paid in full within 30 days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

4. Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise

involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorney's fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors.

5. Advancement of Expenses of Employees and Agents. The Corporation may pay the expenses (including attorney's fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors.

6. Non-Exclusivity of Rights. The rights conferred on any person by this Article Eleventh shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the certificate of incorporation, these by-laws, agreement, vote of stockholders or disinterested directors or otherwise.

7. Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification from such other Corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise.

8. Insurance. The Board of Directors may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article Eleventh; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article Eleventh.

9. Amendment or Repeal. Any repeal or modification of the foregoing provisions of this Article Eleventh shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this day of December, 2014.

By: _____

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

DISCLOSURE SCHEDULE

DISCLOSURE SCHEDULE

This Disclosure Schedule is delivered by Seres Health, Inc. (the “**Company**”) pursuant to the Series D Preferred Stock Purchase Agreement (the “**Agreement**”) of even date herewith by and among the Company and the Purchasers named in the Purchase Agreement. Capitalized terms used herein, which are not otherwise defined, shall have the respective meanings ascribed to such terms in the Agreement.

Any disclosure hereunder shall not be deemed to be an admission or acknowledgment by the Company that such information is material to, or outside the ordinary course of business of, the Company. Nothing herein constitutes an admission of liability or an admission against the Company’s interest. Nothing in the Disclosure Schedules is intended to broaden the scope of any representation or warranty contained in the Agreement or to create any covenant.

References to any document are to such document as amended as of the date of the Agreement, provided such amendment is properly noted in the reference to such document. All descriptions in the Disclosure Schedule of documents that have been previously delivered or made available to the Purchasers or their counsel are qualified in their entirety by reference to the actual documents.

The section numbers below correspond to the section numbers of the representations and warranties in the Agreement; provided, however, that any information disclosed herein under any section number shall be deemed to be disclosed and incorporated into any other section number under the Agreement where such disclosure would be appropriate and such appropriateness is reasonably apparent from the face of such disclosure.

Inclusion of any item in this Disclosure Schedule (1) does not represent a determination that such item is material or establish a standard of materiality, (2) does not represent a determination that such item did not arise in the ordinary course of business and (3) does not represent a determination that the transactions contemplated by the Agreement require the consent of third parties.

Schedule 2.2(c)

Capitalization of the Company Immediately Following the Closing

(i) Issued and Outstanding Common Stock.

Record Owner	Common Stock	Vesting Schedule	Repurchase Price
Flagship VentureLabs IV LLC	3,055,556 shares	n/a	n/a
Nestlé Health Science US Holdings, Inc.	1,944,444 shares	n/a	n/a
George Church	100,000 shares	25% on the first anniversary of the grant date; thereafter, 6.25% quarterly, such that the shares will have vested in full on June 30, 2015	\$0.001 per share
James Collins	50,000 shares	25% on the first anniversary of the grant date; thereafter, 6.25% quarterly, such that the shares will have vested in full on June 30, 2015	\$0.001 per share
Peter Hutt	50,000 shares	25% on the first anniversary of the grant date; thereafter, 6.25% quarterly, such that the shares will have vested in full on June 30, 2015	\$0.001 per share
Kim Lewis	100,000 shares	25% on the first anniversary of the grant date; thereafter, 6.25% quarterly, such that the shares will have vested in full on September 30, 2015	\$0.001 per share
David Relman	100,000 shares	25% on the first anniversary of the grant date; thereafter, 6.25% quarterly, such that the shares will have vested in full on September 30, 2015	\$0.001 per share

Andrew Goodman	10,000 shares	25% of the shares vested on January 7, 2013 and an additional 6.25% of the original number of shares vest in twelve equal quarterly installments commencing on April 7, 2013 and continuing in like fashion thereafter until all shares have vested	\$0.001 per share
John Aunins	50,000 shares	Shares are fully vested	\$0.001 per share
Avak Kahvejian	150,000 shares	16.67% of the shares vested on June 16, 2012 and an additional 16.67% of the original number of shares vest in quarterly installments thereafter until fully vested	\$0.001 per share
Geoffrey von Maltzahn	300,000 shares	25% of the shares vested on March 12, 2012 and an additional 6.25% of the original number of shares vest at the end of each three month period such that the shares will have vested in full on March 12, 2015	\$0.001 per share
David Berry	700,000 shares	50% of the shares vested on January 28, 2012 and an additional 6.25% of the original number of shares vest in quarterly installments commencing on April 28, 2012 until fully vested	\$0.001 per share
Frank Bobe	245,000 shares	n/a	
Michael Briskin	6,563 shares	n/a	
Matthew Henn	15,000 shares	n/a	
Anthony D'Onofrio	3,750 shares	n/a	

Toshiro Ohsumi	6,562 shares	n/a
Allison DiGaetano	1,375 shares	n/a
Han Zhang	1,000 shares	n/a
Alexander Belanger	1,500 shares	n/a
Total	6,890,750 shares	

(ii) Granted Stock Options.

Optionee	Date of Grant	Type of Grant	Stock Options	Price/CS Share	Vesting Commencement Date	Date of Exercise	Options Exercised	Options Canceled	Options Outstanding	Vesting Schedule
EMPLOYEES:										
Rebecca McNeill	08/22/12	ISO	55,000	\$ 0.10	07/16/12			55,000	0	1
Matthew Henn	08/22/12	ISO	30,000	\$ 0.10	06/01/12	08/12/14	15,000		15,000	1
Mary-Jane McKenzie	08/22/12	ISO	17,500	\$ 0.10	06/14/12				17,500	1
Anthony D'Onofrio	08/22/12	ISO	7,500	\$ 0.10	05/21/12	07/28/14	3,750	3,750	0	1
Kevin Litcofsky	09/27/12	ISO	7,500	\$ 0.10	08/31/12				7,500	1
Tohiro Ohsumi	09/27/12	ISO	15,000	\$ 0.10	09/10/12	07/31/14	6,562		8,438	1
Jonathan Winkler	09/27/12	ISO	7,500	\$ 0.10	09/24/12				7,500	1
Alexander Belanger	05/17/13	ISO	3,000	\$ 0.48	06/26/12	08/15/14	1,500	1,500	0	1
Allison DiGaetano	05/17/13	ISO	2,000	\$ 0.48	10/22/12	09/02/14	1,375		625	1
David Cook	05/17/13	ISO	327,500	\$ 0.48	10/24/12				327,500	1
John Aunins	05/17/13	ISO	200,000	\$ 0.48	12/01/12				200,000	1
Marin Vulic	05/17/13	ISO	7,500	\$ 0.48	03/07/13				7,500	1
Greg McKenzie	11/06/13	ISO	17,500	\$ 0.48	09/19/13				17,500	1
Han (Angela) Zhang	11/06/13	ISO	4,000	\$ 0.48	08/21/13	08/22/14	1,000	3,000	0	1
Christopher McChalicher	11/06/13	ISO	7,500	\$ 0.48	09/09/13				7,500	1
Matthew Henn	08/07/14	ISO	30,000	\$ 0.71	04/30/14				30,000	1
Matthew Henn	08/07/14	ISO	30,000	\$ 0.71	06/18/14				30,000	1
Matthew Henn	08/07/14	NQO	40,000	\$ 0.71					40,000	5
Roger Pomerantz	08/07/14	ISO	321,931	\$ 0.71	06/01/14				321,931	1
Roger Pomerantz	08/07/14	NQO	1,353,820	\$ 0.71	06/01/14				1,353,820	1
Sanabel Almomani	08/21/14	ISO	3,000	\$ 0.71	06/26/14				3,000	1
David Stancyk	08/21/14	ISO	3,000	\$ 0.71	06/30/14				3,000	1
Jose Manuel Otero	08/21/14	ISO	30,000	\$ 0.71	08/04/14				30,000	1
Jose Manuel Otero	08/21/14	NQO	20,000	\$ 0.71					20,000	5
Carol Lewis Cullinan	10/06/14	ISO	20,000	\$ 3.14	09/15/14				20,000	1
Sarah Garant	10/06/14	ISO	7,500	\$ 3.14	09/15/14				7,500	1
Stephanie Woodall	10/06/14	ISO	4,000	\$ 3.14	09/22/14			4,000	0	1
Lisa Geller	10/06/14	ISO	25,000	\$ 3.14	09/29/14				25,000	1
Eric D. Shaff	12/09/14	ISO	262,692	\$ 7.79	11/17/14				262,692	1
James Weston	12/09/14	ISO	50,000	\$ 7.79	12/08/14				50,000	1
Julie Button	12/09/14	ISO	7,500	\$ 7.79	11/17/14				7,500	1
NON EMPLOYEES:										
Sherwood Gorbach	08/22/12	NSO	50,000	\$ 0.10	09/01/12				50,000	2
Eric Collard	08/22/12	NSO	36,500	\$ 0.10	08/27/13				36,500	3
Peter Turnbaugh	08/22/12	NSO	30,000	\$ 0.10	06/01/12				30,000	1
Charles L. Cooney	08/22/12	NSO	30,000	\$ 0.10	06/01/12				30,000	1
Ed deLong	08/22/12	NSO	15,000	\$ 0.10	10/31/11				15,000	1
Patrick Cahil	08/22/12	NSO	5,000	\$ 0.10	08/25/12				5,000	1
Georgia Giannoukos	08/22/12	NSO	5,000	\$ 0.10	08/25/12				5,000	1
Mike Cerruti	09/27/12	NSO	6,336	\$ 0.10	09/27/12				6,336	4
Werner Cautreels	05/17/13	NSO	100,000	\$ 0.48	03/01/13				100,000	1
Curtis Huttenhower	05/17/13	NSO	30,000	\$ 0.48	02/26/13				30,000	1
Max Nieuwdorp	05/17/13	NSO	30,000	\$ 0.48	04/08/13				30,000	1
Roger Pomerantz	11/06/13	NSO	220,000	\$ 0.48	09/09/13				220,000	1
Peter Barton Hutt	11/06/13	NSO	50,000	\$ 0.48	05/17/13				50,000	1
Beth Bronstein	08/21/14	NSO	3,500	\$ 0.71	07/21/14			3,500	0	1
Richard Kinder	10/06/14	NSO	75,000	\$ 3.14	10/06/14				75,000	1
Lorence Kim	10/06/14	NSO	75,000	\$ 3.14	10/06/14				75,000	1
Total:			3,678,779				29,187	70,750	3,578,842	

Vesting Schedule:

- #1) 25% of the total number of shares on the first anniversary of the Vesting Start Date noted in the following table and as to an additional 6.25% of the total number of shares on the last day of each calendar quarter thereafter
- #2) Stock option to vest (subject to continued service with the Corporation) as to 6.25% of the total number of shares on September 1, 2012 and as to an additional 6.25% of the total number of shares on the last day of each calendar quarter thereafter
- #3) Stock option to vest (subject to continued service with the Corporation) as to 25% of the total number of shares on February 27, 2013 and as to an additional 4.167% of the total number of shares on the last day of each month
- #4) Options shall become immediately fully vested on the Grant Date.
- #5) Performance based

(iii) Shares of Common Stock reserved for Future Award Grants under the Stock Plan:

0 shares

(iv) Each series of Preferred Stock.

8,230,997 shares of Series A Preferred Stock:

Flagship Ventures Fund IV, L.P.	6,105,362
Flagship Ventures Fund IV-Rx, L.P.	1,526,338
Flagship Ventures Fund 2007, L.P.	599,297

2,247,192 shares of Series A-2 Preferred Stock:

Flagship Ventures Fund IV, L.P.	898,877
Flagship Ventures Fund IV-Rx, L.P.	224,719
Enso Ventures 2 Limited	1,123,596

4,831,359 shares of Series B Preferred Stock:

Flagship Ventures Fund IV, L.P.	1,818,181
Flagship Ventures Fund IV-Rx, L.P.	454,546
Enso Ventures 2 Limited	681,818
Mayo Clinic	795,454
Alexandria Equities, LLC	909,090
Roger Pomerantz	22,727
Favreau 2008 Trust, dtd 4-10-2008	45,454
John Aunins	34,090
David Cook	45,454
Matthew Henn	24,545

3,946,328 shares of Series C Preferred Stock:

Fidelity Select Portfolios: Biotechnology Portfolio	1,292,035
Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund	352,270
Fidelity Growth Company Commingled Pool	107,186
Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund	142,139
Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund	572,827
Rock Springs Capital Master Fund LP	82,215
BlackRock Health Sciences Trust	20,710
BlackRock Health Sciences Opportunities Portfolio, a series of BlackRock Funds	301,970
BlackRock Health Sciences Master Unit Trust	6,180
Leerink Holdings LLC	41,107
Leerink Swann Co-Investment Fund, LLC	41,108
T. Rowe Price Health Sciences Fund, Inc.	329,922
TD Mutual Funds - TD Health Sciences Fund	16,282
VALIC Company I - Health Sciences Fund	20,906
T. Rowe Price Health Sciences Portfolio	15,843
John Hancock Variable Insurance Trust - Health Sciences Trust	9,734

John Hancock Funds II - Health Sciences Fund	18,389
Sofinnova Venture Partners IX, L.P.	82,215
RA Capital Healthcare Fund, LP	246,645
OrbiMed Private Investments V, LP	246,645
2,222,222 shares of Series D Preferred Stock: Nestlé Health Science US Holdings, Inc.	2,222,222
1,388,889 shares of Series D-1 Preferred Stock: Nestlé Health Science US Holdings, Inc.	1,388,889

(v) Warrants or Stock Purchase Rights.

- Reference is made to the Assignment, Assumption and Waiver Agreement by and among Essentient, Inc., the Company and Flagship Ventures Fund 2007 and the obligations and liabilities with respect to the convertible promissory notes assigned under the agreement (the “**Assignment, Assumption and Waiver Agreement**”). Such promissory notes have been fully converted into shares of Series A Preferred Stock.
- Pursuant to a Research and Option Agreement, dated on or about the date hereof, by and between the Company and Mayo Foundation for Medical Education and Research (the “**Mayo Research and Option Agreement**”), the Company issued Mayo Foundation for Medical Education and Research a funding warrant to purchase up to an aggregate of 454,545 shares of Common Stock based on the terms and conditions set forth in the Research and Option Agreement. The Company also issued Mayo Foundation for Medical Education and Research an incentive warrant to purchase up to an aggregate of 284,090 shares of Common Stock upon the achievement of certain milestones set forth in such warrant. No shares of Common Stock are issuable pursuant to the terms of such warrant as of the date hereof.
- Pursuant to a Participation Rights Agreement entered into by and between the Company and Alexandria Equities, LLC (“**Alexandria**”), an affiliate of the Company’s landlord, Alexandria purchased \$250,000 of the shares issued in the Company’s Series B Preferred Stock financing. Alexandria has no further rights to acquire shares of the Company pursuant to the Participation Rights Agreement.
- Pursuant to that certain offer letter from the Company to John Aunins, dated as of October 18, 2012 (the “**Aunins Offer Letter**”), Mr. Aunins invested \$50,000 in the Company’s Series B Preferred Stock financing. Mr. Aunins has no further rights to participate in the Company’s future equity financings pursuant to the Aunins Offer Letter.
- Pursuant to a Loan and Security Agreement entered into by and between the Company and Comerica Bank in September 2013 (the “**Comerica Loan Agreement**”), the Company issued Comerica Bank a Warrant to purchase up to 92,127 shares of Series A-2 Preferred Stock at a purchase price of \$1.78 per share.

Schedule 2.2(d)

Acceleration

Reference is made to that certain offer letter from the Company to David Cook, dated as of October 4, 2012 (the "**Cook Offer Letter**").

Reference is made to that certain offer letter from the Company to Roger Pomerantz, dated as of April 23, 2014 (the "**Pomerantz Offer Letter**").

Reference is made to that certain offer letter from the Company to Eric Shaff, dated as of October 28, 2014 (the "**Shaff Offer Letter**").

Reference is made to the Aunins Offer Letter.

Schedule 2.3

Subsidiaries

The Company is in the process of incorporating a Massachusetts securities corporation, which will be a wholly owned subsidiary of the Company.

Schedule 2.8**Company Intellectual Property****(a)(i)**Patents/Applications

<u>SERES HEALTH REF.</u>	<u>Country</u>	<u>Application Number/Patent Number</u>	<u>FILING DATE</u>	<u>TITLE</u>
SER0001PR1*	US	61442586	14-Feb-11	Compositions and Methods of Treatment of Gastro-Intestinal Disorders Using Microbial Ecosystems
SER0001PR2*	US	61606192	2-Mar-12	Compositions and Methods of Treatment of Gastro-Intestinal Disorders Using Microbial Ecosystems
SER0002PR1*	US	61606203	2-Mar-12	Compositions and Methods of Treatment of Gastro-Intestinal Disorders Using Extracted Microbial Communities
SER0003/0004PR1*	US	61606221	2-Mar-12	Compositions and Methods of Treatment of Gastro-Intestinal Disorders Using Microbial Ecosystems
SER0005PR1*	US	61606224	2-Mar-12	Microbial Ecosystems Compositions and Methods for the Treatment of Diseases and Disorders
SER0006PR1@	US	61729518	23-Nov-12	Novel Combinations of Microbes
SER0006PR2@	US	61729519	23-Nov-12	Novel Combinations of Microbes

SER0006PR3@	US	61729520	23-Nov-12	Novel Combinations of Microbes
SER0006PR4@	US	61729521	23-Nov-12	Novel Combinations of Microbes
SER0006PR5@	US	61729522	23-Nov-12	Novel Combinations of Microbes
SER0006PR6@	US	61729524	23-Nov-12	Novel Combinations of Microbes
SER0006PR7@	US	61729515	23-Nov-12	Novel Combinations of Microbes
SER0006PR8@	US	61729517	23-Nov-12	Novel Combinations of Microbes
SER0006PR9@	US	61729525	23-Nov-12	Novel Combinations of Microbes
SER0006PR10@	US	61729526	23-Nov-12	Novel Combinations of Microbes
SER0006PR11@	US	61729527	23-Nov-12	Novel Combinations of Microbes
SER0006WO1	PCT	PCTUS2013071758	25-Nov-13	Synergistic Bacterial Compositions and Methods of Production and Use Thereof
SER0006US1 i	US	14091201/8906668	26-Nov-13	Synergistic Bacterial Compositions and Methods of Production and Use Thereof
SER0006US2^	US	14221190	20-Mar-14	Synergistic Bacterial Compositions and Methods of Production and Use Thereof
SER0007PR1@	US	61760584	4-Feb-13	Method of Populating a Gastrointestinal Tract
SER0007WO1	PCT	PCTUS2014014738	4-Feb-14	Method of Populating a Gastrointestinal Tract

SER0008PR1@	US	61760585	4-Feb-13	Compositions and Methods
SER0008WO1	PCT	PCTUS2014014747	4-Feb-14	Compositions and Methods
SER0009PR1@	US	61781854	14-Mar-13	Methods for Pathogen Detection and Enrichment from Materials and Compositions
SER0009WO1	PCT	PCTUS2014029539	14-Mar-14	Methods for Pathogen Detection and Enrichment from Materials and Compositions
SER0010PR1@	US	61760574	4-Feb-13	Compositions and Methods for Inhibition of Pathogenic Bacterial Growth
SER0010WO1	PCT	PCTUS2014014744	4-Feb-14	Compositions and Methods for Inhibition of Pathogenic Bacterial Growth
SER0011PR1@	US	61760606	4-Feb-13	Compositions and Methods
SER0011PR2@	US	61926918	13-Jan-14	Compositions and Methods
SER0011WO1	PCT	PCTUS2014014745	4-Feb-14	Compositions and Methods
SER0011US1^	US	14197044	4-Mar-14	Compositions and Methods
SER011US2	US	14313828	24-Jun-14	Compositions and Methods
SER0012PR2@	US	61798666	15-Mar-13	Network-Based Microbial Compositions and Methods
SER0012WO1	PCT	PCTUS2014030817	17-Mar-14	Network-Based Microbial Compositions and Methods

SER0012PR3	US	61954532	17-Mar-14	Network-Based Microbial Compositions and Methods
SER0013PR2@	US	61798606	15-Mar-13	Microbial Compositions and Methods
SER0014PR1*	US	61856371	19-Jul-13	Microbial Compositions and Methods
SER0014PR2	US	62026674	20-Jul-14	Microbial Compositions and Methods
SER0015PR1@	US	61908698	25-Nov-13	Synergistic Bacterial Compositions and Methods of Production and Use Thereof
SER0016PR1*	US	61908675	25-Nov-13	Bacterial Compositions and Methods of Production and Use Thereof
SER0017PR1@	US	61908702	25-Nov-13	Defined Bacterial Compositions and Methods of Production and Use Thereof
SER0018PR1*	US	61908696	25-Nov-13	Bacterial Compositions and Methods of Use Thereof for Treatment of Autism
SER0019PR1@	US	61916761	16-Dec-13	Bacterial Compositions and Methods of Use Thereof for Treatment of Immune System Disorders
SER0019WO1	PCT		16-Dec-14	Bacterial Compositions and Methods of Use Thereof for Treatment of Immune System Disorders
SER0023PR1	US	61926920	13-Jan-14	Infectious Disease

SER0024PR1@	US	62004187	28-May-14	Synergistic Bacterial Compositions and Methods of Production and Use Thereof
SER0024WO1	PCT		25-Nov-14	Synergistic Bacterial Compositions and Methods of Production and Use Thereof
SER0026PR1	US	62047306	8-Sept-14	Infectious Disease

* Abandoned
@ Converted
^ Allowed
i Issued Patent

Trademarks (Live)

<u>Mark</u>	<u>Appl. No</u>	<u>Appl. Date</u>	<u>Reg No</u>	<u>Reg Date</u>	<u>Country</u>	<u>Class(es)</u>
ECOSPOR	86435951	27-Oct-14			United States	5
ECOSPOR	86469811	3-DEC-14			United States	5 and 42
SERES HEALTH	85/755,193	16-Oct-12			United States	5, 32, 42, and 44
SERES	85/651,848	14-Jun-12			United States	5 and 42
SERES LOGO (sphere comprising shapes resembling shaded figure eights)	85/661,601	26-Jun-12			United States	5 and 42
SERES LOGO (sphere comprising shapes resembling shaded figure eights)	85/981,154	26-Jun-12	4,508,229	1-Apr-2014	United States	5

ECOBIOTIC	85/674,109	11-Jul-12			United States	5 and 42
ECOBIOTIC	85/980,662	11-Jul-12	4,464,145	7-Jan-14	United States	5
ECOBIOTIC	011442456	20-Dec-12	011442456	20-May-13	Community Trademark (European Union)	5 and 42
MICROBIOME THERAPEUTICS	86/033,983	9-Aug-13			United States	5
MICROBIOME THERAPEUTICS	86/975,001	9-Aug-13			United States	5
LIFE SAVING MICROBIOME TECHNOLOGIES	86/469,813	3-Dec-14			United States	5
SERES THERAPEUTICS	86/481,483	16-DEC-14			United States	5

(a)(ii) - Product Candidates

SER-109

(b)

The following current Key Employees have excluded works or inventions from his or her assignment of inventions pursuant to such Key Employee's Confidential Information Agreement:

- Toshiro Ohsumi:
MolBioLib (sourceforge.net/projects/molbiolib)
- Matthew Henn:
Algorithms: V-Phaser, V-Profiler, RC454, AV454, VICUNA, ViralView (a.k.a. Viral Vizualizer & V-Visualizer), V-Haplotype
- David Cook:
US Patents: 6514987, 6143490, 7691393, 6270952, 7695725, 6410219, 7833775, 6709810, 7842289, 7927606, 5559250, 5691132, 7293985, 6177441

None of the excluded works or inventions of a proprietary nature listed above is expected to be used or useful or requires a license in the Company's business as the same is conducted or currently planned to be conducted.

(d) - Complaints, Claims, Notices or Threats of Infringement

None.

(e) - Domain Names

seresbiosciences.com
sereshealth.com
serestherapeutics.com
serestx.com
seresdx.com
seresbio.com
eco-spor.com
ecospor.net
ecospor.info
ecospor.org
ecospor.com
seres-therapeutics.com
serestherapeutics.com
serestherapeutics.com
serestherapeutic.com

(f) - Company Intellectual Property Owned by a Third Party

None.

Schedule 2.10

Agreements; Actions

Reference is made to the Assignment, Assumption and Waiver Agreement.

Agreement by and between the Company and Transpharm (the “**Transpharm Agreement**”).

The Company paid Flagship Ventures \$157,000 in 2013 for its services, and it anticipates that it will pay Flagship approximately \$277,307 in 2014.

Reference is made to the Lease Agreement dated June 29, 2012 between the Company and ARE-MA REGION NO.21, LLC, as amended.

Agreement by and between the Company and Olympus

Agreement by and between the Company and Northeastern University

Agreement by and between the Company and The General Hospital Corporation D/B/A Massachusetts General Hospital

Agreement by and between the Company and Mayo Clinic

Agreement by and between the Company and Emory

Agreement by and between the Company and Lifespan

Agreement by and between the Company and Metanome

Agreement by and between the Company and University of North Texas Science Center

Agreement by and between the Company and Danforth Advisors LLC

Agreement by and between the Company and The Miriam Hospital

Agreement by and between the Company and Halloran Consulting

Agreement by and between the Company and Assuerus Strategic Consulting

Agreement by and between the Company and Diane Marsolini Clinical Research Consultant

Agreement by and between the Company and Korn Ferry International

Agreement by and between the Company and Kesic Cervino

Agreement by and between the Company and The Frankel Group

Mayo Research and Option Agreement

Letter Agreement by and between the Company and INC Research, LLC

Agreement by and between the Company and Genbet Biopharmaceuticals S.A.

Agreement by and between the Company and BioReliance Corporation

Agreement by and between the Company and Clinical Consortium, Inc.

Agreement by and between the Company and Omega Pharm Services

Agreement by and between the Company and Integrium, LLC, as amended

Schedule 2.12

Rights of Registration and Voting Rights

Reference is made to the Stock Purchase Agreement dated December 19, 2014, by and between Flagship VentureLabs IV LLC and Nestlé Health Science US Holdings, Inc.

Schedule 2.13

Property

Pursuant to the Comerica Loan Agreement, Comerica Bank has a first priority security interest on all assets of the Company, including but not limited to all present and future accounts, accounts receivable and the rights to payment thereof, inventory, contract rights, chattel paper, unencumbered equipment, general intangibles (excluding intellectual property), and the rights to proceeds from the sale of intellectual property. Comerica Bank and the Company also agreed to a negative pledge with respect to the Company's intellectual property and further agreed that the Company would not pledge or provide a negative pledge to any third party with respect to its intellectual property during the term of the Comerica credit facility.

Schedule 2.15

Changes

(f)

The following officers of the Company have the target annual cash bonus amounts (expressed as a percentage of the officer's annual base salary) set forth opposite the officer's name in respect of performance during the Company's year ended December 31, 2014:

<u>Name</u>	<u>Target Bonus (%)</u>
David Cook	30%
John Aunins	25%
Matthew Henn	25%

Effective December 15, 2014, the annual base salary of Matthew Henn was increased to \$185,000.

Schedule 2.16(a)**Employee Matters****(a)**

The Company currently employs 24 full time employees, two part-time employees and engages 17 outside consultants or independent contractors.

Name	Salary	Bonus	Severance Obligation	Deferred Compensation
Roger Pomerantz	\$425,000	Targeted at 50% of annual salary	Six months compensation if within six months of a Sales Event (i) terminated without Cause or (ii) resigns for Good Reason and complies with a separation agreement. (Capitalized terms are defined within the Pomerantz Offer Letter.)	None
Eric Shaff	\$300,000	Targeted at 30% of annual salary	Six months compensation if within six months of a Sales Event (i) terminated without Cause or (ii) resigns for Good Reason and complies with a separation agreement. (Capitalized terms are defined within the Shaff Offer Letter.)	None
John Aunins	\$260,000	Targeted at 25% of annual salary	Three months compensation if (i) terminated without Cause or (ii) (a) terminated without Cause or (b) terminates for Good Reason, in case of (ii)(a) (Capitalized terms are defined within the Aunins Offer Letter.)	None
David Cook	\$300,000	Targeted at 30% of annual salary	Four months compensation if (i) terminated without Cause or (ii) (a) terminated without Cause or (b) terminates for Good Reason, in case of (ii)(a) (Capitalized terms are defined within the Cook Offer Letter.)	None
Carol Lewis-Cullinan	\$225,000	\$10,000 signing bonus and performance bonuses upon the achievement of certain milestones	None	None

Lisa N. Geller	\$ 220,000	None	None	None
Jose Manual Otero	\$ 185,000	\$30,000 signing bonus	None	None
Matthew Henn		Targeted at 25% of		
	\$ 185,000	annual salary	None	None
Mary Jane Lombardo	\$ 115,000	None	None	None
Toshiro Ohsumi	\$ 100,000	None	None	None
Transpharm	\$1,260,437	None	None	None
Danforth Advisors LLC	\$ 200,840	None	None	None
Diane Marsolini	\$ 107,026	None	None	None
Gregory McKenzie	\$ 120,000	None	None	None
Sarah M. Garant	\$ 100,000	None	None	None
Christopher McChalicher	\$ 100,000	None	None	None
Assuerus Strategic Consulting	\$ 134,680	None	None	None
Stratacuity	\$ 100,000	None	None	None

The Company paid Flagship Ventures \$157,000 in 2013 for its services, and it anticipates that it will pay Flagship approximately \$277,307 in 2014.

(d)

Reference is made to the Aunins Offer Letter, the Cook Offer Letter, the Pomerantz Offer Letter and the Shaff Offer.

(g)

The Company provides benefits to its employees under the benefits plan of Flagship Ventures Management, Inc., which is controlled by Flagship Ventures.

In addition, the Company sponsors a 401(k) plan where employees are able to defer their salary to the IRS set limits. No Company match is provided.

Schedule 2.17

Tax Returns and Payments

In 2013, certain miscellaneous employee reimbursements related to commuting expenses incurred by John Aunins may have been improperly reported for federal and state income tax purposes. The total amount of reimbursements at issue is less than \$10,000.

Schedule 2.19

Employee Agreements

See Schedule 2.8(b).

Schedule 2.21

Clinical Trials

The Company is currently conducting a single arm study entitled “Modified Fecal Microbiota Transplant” which is testing the oral delivery of the company’s lead Ecobiotic® microbial therapeutic, SER-109 for the prevention of Clostridium difficile recurrence in multiply recurrent patients.

The Company filed its investigational new drug application, or IND, with the Federal Drug Administration on December 10, 2014 to initiate its Phase 3 clinical trial for SER-109.

EXHIBIT C

FORM OF INVESTORS' RIGHTS AGREEMENT

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT is made as of the 19th day of December, 2014, by and among Seres Health, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**."

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") possess registration rights, information rights, rights of first offer, and other rights pursuant to an Amended and Restated Investors' Rights Agreement dated as of November 24, 2014, between the Company and such Investors (as amended, the "**Prior Agreement**");

WHEREAS, the Existing Investors desire to amend and restate the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, one of the Investors is a party to that certain Series D Preferred Stock Purchase Agreement of even date herewith between the Company and such Investor (the "**Purchase Agreement**"), under which certain of the Company's and such Investor's obligations are conditioned upon the execution and delivery of this Agreement by the parties hereto;

NOW, THEREFORE, the Company and the Existing Investors hereby agree to amend and restate the Prior Agreement in its entirety as set forth herein, and all of the parties hereto further agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital or other investment fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company or investment advisor with, such Person.

1.2 "**Common Stock**" means shares of the Company's common stock, par value \$0.001 per share.

1.3 "**Damages**" means any loss, damage, or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged

violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.4 “**Derivative Securities**” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.5 “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.6 “**Excluded Registration**” means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.7 “**Form S-1**” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.8 “**Form S-3**” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.9 “**GAAP**” means generally accepted accounting principles in the United States.

1.10 “**Holder**” means any holder of Registrable Securities who is a party to this Agreement.

1.11 “**Immediate Family Member**” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.12 “**Initiating Holders**” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.13 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.14 “**Key Employee**” means any executive-level employee (including division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.15 “**Major Investor**” means (i) any Investor that, individually or together with such Investor’s Affiliates, holds at least 281,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof) and (ii) any Investor that, individually or together with such Investor’s Affiliates, holds at least 164,430 shares of Series C Preferred Stock (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.16 “**New Securities**” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.17 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.18 “**Preferred Director**” means the director of the Company that the holders of record of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are entitled to elect pursuant to the Company’s Certificate of Incorporation.

1.19 “**Preferred Stock**” means shares of Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock.

1.20 “**Registrable Securities**” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) the Common Stock held by Flagship VentureLabs IV LLC as of the date of the Prior Agreement (including without limitation and for the avoidance of doubt the Common Stock acquired by Nestlé Health Science US Holdings, Inc. (“**Nestlé**”) pursuant to the Stock Purchase Agreement dated as of December 19, 2014, by and between Flagship VentureLabs IV LLC and Nestlé (the “**Common Stock Purchase Agreement**”)); (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) and (ii) above; and (iv) the Common Stock issued or issuable to Comerica Ventures Incorporated, its successors and assigns, upon conversion of shares of any securities of the Company (including without limitation Series A-2 Preferred Stock) issuable upon exercise of the warrant issued by the Company to Comerica Bank pursuant to that certain Loan and Security Agreement, dated as of September 9, 2013, between the Company and Comerica Bank, as may be amended and/or restated from time to time; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.21 “**Registrable Securities then outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.22 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Subsection 2.12(b) hereof.

1.23 “**SEC**” means the Securities and Exchange Commission.

1.24 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.25 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.26 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.27 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

1.28 “**Series A Preferred Stock**” means shares of the Company’s Series A Preferred Stock, par value \$0.001 per share.

1.29 “**Series A-2 Preferred Stock**” means shares of the Company’s Series A-2 Preferred Stock, par value \$0.001 per share.

1.30 “**Series B Preferred Stock**” means shares of the Company’s Series B Preferred Stock, par value \$0.001 per share.

1.31 “**Series C Preferred Stock**” means shares of the Company’s Series C Preferred Stock, par value \$0.001 per share.

1.32 “**Series C Purchase Agreement**” means that certain Series C Preferred Stock Purchase Agreement, dated as of November 24, 2014, by and among the Company and the purchasers named therein.

1.33 “**Series D Preferred Stock**” means shares of the Company’s Series D Preferred Stock, par value \$0.001 per share.

1.34 “**Series D-1 Preferred Stock**” means shares of the Company’s Series D-1 Preferred Stock, par value \$0.001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five (5) years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement for which the anticipated aggregate offering price would exceed \$10,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsection 2.1(c) and Subsection 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least thirty percent (30%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price of at least \$5,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsection 2.1(c) and Subsection 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Company’s Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than ninety (90) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once

in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such ninety (90) day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a) (i) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Subsection 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration or the IPO), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by a majority in interest of the Initiating Holders, subject only to the reasonable approval of the Company. In such event, the right of any Holder to include such

Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, and (ii) the number of Registrable Securities included in the offering be reduced below thirty percent (30%) of the total number of securities included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for

the benefit of any of the foregoing Persons, shall be deemed to be a single “selling Holder,” and any pro rata reduction with respect to such “selling Holder” shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such “selling Holder,” as defined in this sentence.

(c) For purposes of Subsection 2.1, a registration shall not be counted as “effected” if, as a result of an exercise of the underwriter’s cutback provisions in Subsection 2.3(a), fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and

disbursements of counsel for the Company; and the reasonable fees and disbursements of one counsel for the selling Holders selected by the Holders of a majority of the Registrable Securities to be registered (“**Selling Holder Counsel**”), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsection 2.1(a) or Subsection 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsection 2.1(a) or Subsection 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel, accountants and investment advisors for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its

officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may

be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S 3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would provide to such holder the right to include securities in any registration on other than a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder.

2.11 "Market Stand off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement for such IPO, and shall be applicable to the Holders only if all officers and directors of the Company and holders of at least one percent (1%) of the outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding shares of Preferred Stock) are subject to the same restrictions. The underwriters in connection with such registration are intended third party beneficiaries of this Subsection 2.11 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred in violation of this Agreement, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of Registrable Securities pursuant to an effective registration statement under the Securities Act or, following the IPO, SEC Rule 144 to be bound by the terms of this Subsection 2.12 if the transferred securities do not remain Registrable Securities hereunder following such transfer.

(b) Each certificate or instrument representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction or, following the IPO, the transfer is made pursuant to SEC Rule 144, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no

action” letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or “no action” letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that, with respect to transfers following the IPO under the foregoing clause (y), each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144 or pursuant to an effective registration statement under the Securities Act, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsection 2.1 or Subsection 2.2 shall terminate upon the earliest to occur of:

(a) the closing of a Deemed Liquidation Event, as such term is defined in the Company’s Certificate of Incorporation;

(b) such time after the IPO as SEC Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder’s shares without limitation during a three-month period without registration; and

(c) the fifth (5th) anniversary of the IPO.

3. Information Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor and each Investor owning shares of Series C Preferred Stock purchased from the Company pursuant to the Series C Purchase Agreement, provided that the Board of Directors has not reasonably determined that such Major Investor or Investor, as the case may be, is a competitor of the Company:

(a) as soon as practicable, but in any event within one hundred twenty (120) days after the end of each fiscal year of the Company, (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year and (iii) a statement of stockholders’ equity as of the end of such year, all such financial statements audited and certified by independent public accountants selected by the Company and approved by the Board of Directors, including the Preferred Director;

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and of cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit any Major Investor to calculate its percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct; and

(d) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1 to provide information (i) that the Company reasonably determines in good faith to be confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or a trade secret or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date sixty (60) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

Notwithstanding anything else in this Subsection 3.1 to the contrary, (x) the Company shall not be obligated to provide any information under Subsection 3.1(d) to the Major Investor that purchased Series D Preferred Stock from the Company pursuant to the Purchase Agreement, or any of its permitted transferees, and (y) the Company shall not be obligated to provide any information under Subsection 3.1 to the Major Investor that purchased Series D Preferred Stock

from the Company pursuant to the Purchase Agreement, or any of its permitted transferees, unless such Major Investor continues to own shares representing at least fifty percent (50%) of the combined aggregate voting power of (1) the shares of Series D Preferred Stock and Series D-1 Preferred Stock purchased by such Major Investor pursuant to the Purchase Agreement and (2) the shares of Common Stock purchased by such Major Investor pursuant to the Stock Purchase Agreement, dated as of December 19, 2014, by and between the Flagship VentureLabs IV LLC and such Major Investor.

3.2 Inspection. The Company shall permit each Major Investor (provided that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company), at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or a trade secret or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Termination of Information Rights. The covenants set forth in Subsection 3.1 and Subsection 3.2 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, unless the consideration received by the Investors is in the form of securities that are privately held, whichever event occurs first.

3.4 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.4 by such Investor), (b) is or has been independently developed or conceived by any Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to any Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information: (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.4; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, provided that such Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it among itself and its Affiliates in such proportions as it deems appropriate.

(a) The Company shall give notice (the “**Offer Notice**”) to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by such Major Investor bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities). At the expiration of such twenty (20) day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a “**Fully Exercising Investor**”) of any other Major Investor’s failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the

New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Company's Certificate of Incorporation); or (ii) shares of Common Stock issued in the IPO.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall use its commercially reasonable efforts to (i) maintain Directors and Officers liability insurance and (ii) upon the request of the Board of Directors or the holders of a majority of the Registrable Securities then outstanding, term "key person" insurance on the Chief Executive Officer of the Company, in each case from financially sound and reputable insurers and in an amount and on terms and conditions satisfactory to the Board of Directors. The Company will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. The "key person" policy shall name the Company as loss payee and neither policy shall be cancelable by the Company without prior approval by the Board of Directors, including the Preferred Director.

5.2 Employee Agreements. The Company will cause (i) each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement and (ii) each Key Employee to enter into a one (1) year noncompetition and nonsolicitation agreement, each in a form acceptable to the Investors. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the consent of the Preferred Director.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including the approval of the Preferred Director, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal quarterly installments over the following thirty-six (36) months, and (ii) a market stand-off provision

substantially similar to that in Subsection 2.11. In addition, unless otherwise approved by the Board of Directors, including the Preferred Director, the Company shall retain a “right of first refusal” on employee transfers until the Company’s IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Qualified Small Business Stock. The Company shall use commercially reasonable efforts to cause the shares of Preferred Stock issued pursuant to the Series C Purchase Agreement, as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the United States Internal Revenue Code of 1986 (as amended, the “**Code**”), to constitute “qualified small business stock” as defined in Section 1202(c) of the Code; provided, however, that such requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor’s written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company’s possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor’s interest in the Company constitutes “qualified small business stock” as defined in Section 1202(c) of the Code.

5.5 Matters Requiring Investor Director Approval. So long as the holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are entitled to elect a Preferred Director, the Company hereby covenants and agrees with the Investors holding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock that it shall not, nor shall it permit any subsidiary to, without approval of the Board of Directors, which approval must include the affirmative vote of the Preferred Director:

(a) make any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company;

(b) make any loan or advance to any Person, including, without limitation, any employee or director of the Company or any subsidiary, except advances and similar expenditures in the ordinary course of business or under the terms of an employee stock or option plan approved by the Board of Directors, including the Preferred Director;

(c) guarantee, directly or indirectly, any indebtedness except for trade accounts of the Company or any subsidiary arising in the ordinary course of business;

(d) make any investment inconsistent with any investment policy approved by the Board of Directors;

(e) incur any aggregate indebtedness in excess of \$250,000 that is not already included in a budget approved by the Board of Directors, other than trade credit incurred in the ordinary course of business;

(f) otherwise enter into or be a party to any transaction with any director, officer, or employee of the Company or any “associate” (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, except for transactions contemplated by this Agreement and the Purchase Agreement; transactions resulting in payments to or by the Company in an aggregate amount less than \$100,000 per year; or transactions made in the ordinary course of business and pursuant to reasonable requirements of the Company’s business and upon fair and reasonable terms that are approved by a majority of the Board of Directors;

(g) hire, terminate, or change the compensation of the executive officers, including approving any option grants or stock awards to executive officers;

(h) change the principal business of the Company, enter new lines of business, or exit the current line of business;

(i) sell, assign, license, pledge, or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business;

(j) increase the shares of Common Stock reserved for issuance under the Company’s 2012 Stock Incentive Plan or adopt any other equity incentive plan; or

(k) enter into any corporate strategic relationship involving the payment, contribution, or assignment by the Company or to the Company of money or assets greater than \$250,000.

5.6 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule, unless agreed by a majority of the Board of Directors, including the Preferred Director. The Company shall reimburse the nonemployee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company’s travel policy) in connection with attending meetings of the Board of Directors. The Company shall cause to be established, as soon as practicable after such request, and will maintain, an audit and compensation committee, each of which shall consist solely of non-management directors. Each non-employee director shall be entitled in such person’s discretion to be a member of any Board committee. Each committee of the Board shall include the Preferred Director.

5.7 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company’s Bylaws, its Certificate of Incorporation, or elsewhere, as the case may be.

5.8 Termination of Covenants. The covenants set forth in this Section 5, except for Subsection 5.7, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 100,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein. Notwithstanding anything to the contrary in this Subsection 6.1, Comerica Ventures, and its successors and assigns, may transfer and assign its rights under the Agreement (together with all related obligations): (a) to any transferee irrespective of the minimum share requirement set forth in clause (iii) of this Subsection 6.1; and (b) to any of its Affiliates, partners or stockholders without compliance with the notice and delivery requirements set forth in clauses (x) and (y) in the proviso at the end of the first sentence of this Subsection 6.1 of the Agreement (but only to the extent such transferee remains bound by the restrictions and obligations of the transferor under the Agreement).

6.2 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts, without regard to conflict of law principles that would result in the application of any law other than the law of the Commonwealth of Massachusetts.

6.3 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company at 161 First Street, Suite 2C, Cambridge, MA 02142, Attention: Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5. If notice is given to the Company, a copy shall also be given to Latham & Watkins LLP, John Hancock Tower, 27th Floor, 200 Clarendon Street, Boston, MA 02116, Attention Peter N. Handrinos, Esq.

6.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction). The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this

Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto; provided, however, that no such amendment shall be binding on Nestlé or any of its Affiliates if such amendment (1) is not entered into or approved in writing by Nestlé or such Affiliate (provided that, for the avoidance of doubt, any such entry into or approval in writing that occurs through the exercise of any right or the enforcement of any obligation arising under Section 4 of the Common Stock Purchase Agreement shall not be deemed for any purpose to constitute an entry into or an approval in writing by Nestlé or such Affiliate for this purpose) and (2)(i) imposes an obligation on Nestlé or such Affiliate that is unrelated to (x) the subject matter of this Agreement or the Purchase Agreement, or the transactions contemplated hereby or thereby, (y) Nestlé's investment in the Company or (z) Nestlé's ownership of securities of the Company or (ii) imposes any restriction on the conduct by Nestlé or any of its Affiliates of its business. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Entire Agreement. This Agreement (including any Schedules hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.10 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the Commonwealth of Massachusetts and to the jurisdiction of the United States District Court for the District of Massachusetts for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of the Commonwealth of Massachusetts or the United States District Court for the District of Massachusetts, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.11 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.12 Further Assurances. At any time or from time to time after the date hereof, the parties agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as the other party may reasonably request in order to evidence or effectuate the consummation of the transactions contemplated hereby and to otherwise carry out the intent of the parties hereunder.

6.13 Acknowledgment. The Company acknowledges that each Investor is in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict any Investor from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

6.14 Massachusetts Business Trust. A copy of the Agreement and Declaration of Trust of each Investor affiliated with Fidelity Management & Research Company is on file with the Secretary of State of the Commonwealth of Massachusetts and notice is hereby given that this Agreement is executed on behalf of the trustees of such Investor or any affiliate thereof as trustees and not individually and that the obligations of this Agreement are not binding on any of the trustees, officers or stockholders of such Investor or any affiliate thereof individually but are binding only upon such Investor or any affiliate thereof and its assets and property.

6.15 Series D-1 Preferred Stock. For all purposes of this Agreement, all outstanding shares of Series D-1 Preferred Stock shall be deemed to have been converted into Series D Preferred Stock and each reference herein to “Preferred Stock” shall be deemed to refer to and include to such shares.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

SERES HEALTH, INC.

By: _____

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

INVESTORS:

NESTLÉ HEALTH SCIENCE US HOLDINGS, INC.

By: _____
Name:
Title:

INVESTORS:

**FIDELITY SELECT PORTFOLIOS:
BIOTECHNOLOGY PORTFOLIO**

By: _____
Name:
Title:

INVESTORS:

**FIDELITY ADVISOR SERIES VII: FIDELITY
ADVISOR BIOTECHNOLOGY FUND**

By: _____
Name:
Title:

INVESTORS:

**FIDELITY GROWTH COMPANY COMMINGLED
POOL**

By: _____
Name:
Title:

INVESTORS:

**FIDELITY MT. VERNON STREET TRUST: FIDELITY
SERIES GROWTH COMPANY FUND**

By: _____
Name:
Title:

INVESTORS:

**FIDELITY MT. VERNON STREET TRUST: FIDELITY
GROWTH COMPANY FUND**

By: _____
Name:
Title:

INVESTORS:

ROCK SPRINGS CAPITAL MASTER FUND LP

By: Rock Springs GP LLC

Its: General Partner

By: _____

Name:

Title:

INVESTORS:

BLACKROCK HEALTH SCIENCES TRUST

By: BlackRock Advisors, LLC

Its: Investment Adviser

By: _____

Name:

Title:

INVESTORS:

**BLACKROCK HEALTH SCIENCES OPPORTUNITIES
PORTFOLIO, A SERIES OF BLACKROCK FUNDS**

By: BlackRock Advisors, LLC

Its: Investment Adviser

By: _____

Name:

Title:

INVESTORS:

**BLACKROCK HEALTH SCIENCES MASTER UNIT
TRUST**

By: BlackRock Capital Management, Inc.

Its: Investment Adviser

By: _____

Name:

Title:

INVESTORS:

LEERINK HOLDINGS LLC

By: _____

Name:

Title: Authorized Person

INVESTORS:

LEERINK SWANN CO-INVESTMENT FUND, LLC

By: _____

Name:

Title: Manager

INVESTORS:

SOFINNOVA VENTURE PARTNERS IX, L.P.

By: Sofinnova Management IX, L.L.C.
its General Partner

By: _____
Name: Srinivas Akkaraju
Title: Managing Member

INVESTORS:

T. Rowe Price Health Sciences Fund, Inc.
TD Mutual Funds – TD Health Sciences Fund
Valic Company I – Health Sciences Fund
T. Rowe Price Health Sciences Portfolio
John Hancock Variable Insurance Trust – Health Sciences
Trust
John Hancock Funds II – Health Sciences Fund,
Each fund, severally and not jointly

By: T. ROWE PRICE ASSOCIATES, INC.,
Investment Adviser or Subadviser

By: _____
Name:
Title:

INVESTORS:

RA CAPITAL HEALTHCARE FUND, LP

By: _____
Name: Peter Kolchinsky
Title: Manager

INVESTORS:

ORBIMED PRIVATE INVESTMENTS V, LP

By: OrbiMed Capital GP V LLC, its General Partner

By: OrbiMed Advisors LLC, is Managing Member

By: _____

Name:

Title:

INVESTORS:

FLAGSHIP VENTURES FUND IV, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: _____
Manager

FLAGSHIP VENTURES FUND IV-Rx, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: _____
Manager

FLAGSHIP VENTURES FUND 2007, L.P.

By its General Partner
Flagship Ventures Fund 2007 General Partner LLC

By: _____
Manager

FLAGSHIP VENTURELABS IV LLC

By: FLAGSHIP VENTURES FUND IV, L.P.
its Authorized Member

By: FLAGSHIP VENTURES FUND IV GENERAL
PARTNER LLC
its General Partner

By: _____
Name:
Title:

INVESTORS:

ENSO VENTURES 2 LIMITED
BY INTERLOCK DIRECTOR LTD., DIRECTOR

AUTHORIZED SIGNATORY

AUTHORIZED SIGNATORY

INVESTORS:

MAYO CLINIC

By: _____

Name:

Title:

INVESTORS:

ALEXANDRIA EQUITIES, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, INC., a
Maryland corporation, managing member

By: _____
Name:
Title:

INVESTORS:

Roger J. Pomerantz, M.D.

INVESTORS:

FAVREAU 2008 TRUST, DTD 4-10-2008

By: _____

Name: Jon Favreau

Title: Trustee

By: _____

Name: Joya Favreau

Title: Trustee

INVESTORS:

John Aunins

INVESTORS:

David Cook

INVESTORS:

Matthew Henn

SCHEDULE A

INVESTORS

Name and Address

Nestlé Health Science US Holdings, Inc.
900 Long Ridge Road, Building 2
Stamford, CT 06902
Attention: Andrew Glass, Esq.
Email: andrew.glass@us.nestle.com
F: (480) 379-5510

OrbiMed Private Investments V, LP
c/o OrbiMed Advisors LLC
Attention: Evan Sotiriou
601 Lexington Ave.
54th Floor
New York, NY 10022

With a copy (which shall not constitute notice) to:

Nestlé Health Science S.A.
Avenue Nestlé, 55
1800 Vevey
Switzerland
Attention: Claudio Kuoni, Esq.
Email: Claudio.Kuoni@nestle.com
F: 41.21.924.2875

Fidelity Select Portfolios: Biotechnology Portfolio
Brown Brothers Harriman & Co.
525 Washington Blvd
Jersey City NJ 07310
Attn: Michael Lerman 15th Floor
Corporate Actions
Email: michael.lerman@bbh.com
F: (617) 772-2418

Leerink Swann Co-Investment Fund, LLC
1 Federal Street
Boston, MA 02110
Attention: General Counsel
F: (646) 499-7130

Fidelity Advisor Series VII: Fidelity Advisor
Biotechnology Fund
State Street Bank & Trust
PO Box 5756
Boston, Massachusetts 02206
Attn: Bangle & Co fbo Fidelity Advisor Series VII:
Fidelity Advisor Biotechnology Fund
Email: SSBORPCTIONS@StateStreet.com
F: (617) 988-9110

Leerink Holdings LLC
1 Federal Street
Boston, MA 02110
Attention: General Counsel
F: (646) 499-7130

Fidelity Growth Company Commingled Pool
Brown Brothers Harriman & Co.
525 Washington Blvd
Jersey City NJ 07310
Attn: Michael Lerman 15th Floor
Corporate Actions
Email: michael.lerman@bbh.com
F: (617) 772-2418

T. Rowe Price Health Sciences Fund, Inc.
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

Fidelity Mt. Vernon Street Trust: Fidelity Series
Growth Company Fund
State Street Bank & Trust
PO Box 5756
Boston, Massachusetts 02206
Attn: WAVELENGTH + CO Fidelity Mt. Vernon
Street Trust: Fidelity Series Growth Company Fund
Email: SSBORPCTIONS@StateStreet.com
F: (617) 988-9110

Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund
Ball & Co
C/o Citibank N.A./Custody
IC&D Lock Box
P.O Box 7247-7057
Philadelphia, P.A 19170-7057
Account #: 206681
Email: fidelity.tpacd@citi.com
F: 813-604-1415

BlackRock Health Sciences Master Unit Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com,
chian.jiang@blackrock.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

BlackRock Health Sciences Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com,
chian.jiang@blackrock.com

VALIC Company I - Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

TD Mutual Funds - TD Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

T. Rowe Price Health Sciences Portfolio
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

John Hancock Variable Insurance Trust - Health Sciences Trust
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

BlackRock Health Sciences Master Unit Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com,
chian.jiang@blackrock.com

John Hancock Funds II - Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

Sofinnova Venture Partners IX, L.P.
c/o Sofinnova Ventures, Inc.
Attention: Hooman Shahlavi
3000 Sand Hill Road, Bldg 4, Suite 250
Menlo Park, CA 94025

RA Capital Healthcare Fund, LP
c/o RA Capital Management, LLC,
Attention: Amanda Daniels
20 Park Plaza, Suite 1200
Boston, MA 02116
F: (617) 778-2510

Flagship Ventures Fund IV, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Rock Springs Capital Master Fund LP
Attention: Evans Apeadu
650 South Exeter Street, Suite 1070
Baltimore, MD 21202
Email: evans@rockspringscapital.com

Flagship Ventures Fund IV-Rx, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Roger J. Pomerantz, M.D.
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX

Flagship Ventures Fund 2007, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Favreau 2008 Trust, dtd 4-10-2008
9200 W. Sunset Blvd. PH22
Los Angeles, CA 90069
F: (310) 858-3947

Flagship VentureLabs IV LLC
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Enso Ventures 2 Limited
Suite C1
Hirzel Court
Hirzel Street
St Peter Port
Guernsey
Channel Islands
GY1 2NH
F: +44 (0) 1481 755859

Mayo Clinic
200 First Street SW
Rochester, MN 55905
F: (507) 538-7802

Alexandria Equities, LLC
385 E. Colorado Blvd. Suite 299
Pasadena, CA 91101
F: (626) 578-0770

For purposes of Section 2.1(b), Section 2.2 through Section 2.12, and Section 6 only:

Comerica Ventures Incorporated
1717 Main St.
5th Floor, MC 6406
Dallas, TX 75201

David Cook
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
F: (617) 945-0268

Matthew Henn
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
F: (617) 945-0268

John Aunins
XXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXX
F: (617) 945-0268

EXHIBIT D

FORM OF VOTING AGREEMENT

AMENDED AND RESTATED VOTING AGREEMENT

THIS AMENDED AND RESTATED VOTING AGREEMENT is made and entered into as of this 19th day of December, 2014, by and among Seres Health, Inc., a Delaware corporation (the “**Company**”), each holder of the Company’s Series A Preferred Stock, \$0.001 par value per share (“**Series A Preferred Stock**”), Series A-2 Preferred Stock, \$0.001 par value per share (“**Series A-2 Preferred Stock**”), Series B Preferred Stock, \$0.001 par value per share (“**Series B Preferred Stock**”), Series C Preferred Stock, \$0.001 par value per share (“**Series C Preferred Stock**”), Series D Preferred Stock, \$0.001 par value per share (“**Series D Preferred Stock**”), and Series D-1 Preferred Stock, \$0.001 par value per share (“**Series D-1 Preferred Stock**” and, together with the Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock, the “**Preferred Stock**”) listed on Schedule A (together with any subsequent investors, or transferees, who become parties hereto as “Investors” pursuant to Subsections 7.1(a) or 7.2 below, the “**Investors**”) and those certain stockholders of the Company and holders of options to acquire shares of the capital stock of the Company listed on Schedule B (together with any subsequent stockholders or option holders, or any transferees, who become parties hereto as “Key Holders” pursuant to Subsections 7.1(b) or 7.2 below, the “**Key Holders**”, and, together collectively with the Investors, the “**Stockholders**”).

RECITALS

A. Concurrently with the execution of this Agreement, the Company and one of the Investors are entering into a Series D Preferred Stock Purchase Agreement (the “**Purchase Agreement**”) providing for the sale of shares of Series D Preferred Stock and Series D-1 Preferred Stock. Certain of the Investors (the “**Existing Investors**”) and the Key Holders are parties to the Amended and Restated Voting Agreement dated November 24, 2014, by and among the Company and the parties thereto (the “**Prior Agreement**”). The parties to the Prior Agreement desire to amend and restate that agreement to provide the Investors with the right, among other rights, to designate the election of certain members of the board of directors of the Company (the “**Board**”) in accordance with the terms of this Agreement.

B. The Amended and Restated Certificate of Incorporation of the Company (as may be amended and/or modified from time to time after the date hereof, the “**Restated Certificate**”) provides that (a) the holders of record of the shares of the Company’s Series A Preferred Stock, Series A-2 Preferred Stock, Series B Preferred Stock and Series C Preferred Stock (together, the “**ABC Preferred Stock**”), exclusively and as a separate class, shall be entitled to elect one (1) director of the Company; (b) the holders of record of the shares of common stock, \$0.001 par value per share, of the Company (the “**Common Stock**”), exclusively and as a separate class, shall be entitled to elect one (1) director of the Company; and (c) the holders of record of the shares of the Common Stock and of any other class or series of voting stock (including, without limitation, Series A Preferred Stock, Series A-2 Preferred Stock, Series C Preferred Stock and Series D Preferred Stock) other than the Series D-1 Preferred Stock, exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Company.

C. The parties also desire to enter into this Agreement to set forth their agreements and understandings with respect to how shares of the Company’s capital stock held by them will be voted on, or tendered in connection with, an acquisition of the Company.

NOW, THEREFORE, the Company, the Key Holders and the Existing Investors each hereby agree to amend and restate the Prior Agreement in its entirety as set forth herein, and all of the parties hereto further agree as follows:

1. Voting Provisions Regarding Board of Directors.

1.1 Size of the Board. Each Stockholder agrees to vote, or cause to be voted, all Shares (as defined below) owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that the size of the Board shall be set and remain at eight (8) directors. For purposes of this Agreement, the term “Shares” shall mean and include any securities of the Company the holders of which are entitled to vote for members of the Board, including without limitation, all shares of Common Stock, Preferred Stock, by whatever name called, now owned or subsequently acquired by a Stockholder, however acquired, whether through stock splits, stock dividends, reclassifications, recapitalizations, similar events or otherwise.

1.2 Board Composition. Each Stockholder agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that at each annual or special meeting of stockholders at which an election of directors is held or pursuant to any written consent of the stockholders, the following individuals shall be elected to the Board:

(a) One individual designated by Flagship Ventures Fund IV, L.P., Flagship Ventures Fund IV-Rx, L.P. and Flagship Ventures Fund 2007, L.P. (collectively, “**Flagship**”) who shall be the director elected by the holders of record of the shares of ABC Preferred Stock, exclusively and as a separate class, pursuant to Article Fourth, Part B, Section 3.2 of the Restated Certificate and known as the “Preferred Stock Director” thereunder, who shall initially be Noubar B. Afeyan, for so long as Flagship and its Affiliates (as defined below) continue to own beneficially an aggregate of at least twenty-five percent (25%) of the shares of Series B Preferred Stock purchased by them pursuant to the Series B Preferred Stock Purchase Agreement, dated as of May 23, 2014, by and among the Company and the parties listed on Exhibit A thereto;

(b) One individual designated by Flagship VentureLabs IV LLC (“**VentureLabs**”), who shall be the director elected by the holders of record of the shares of Common Stock, exclusively and as a separate class, pursuant to Article Fourth, Part B, Section 3.2 of the Restated Certificate, who shall initially be David A. Berry, for so long as VentureLabs and its Affiliates continue to own beneficially an aggregate of at least 1,250,000 shares of Common Stock (as adjusted for any stock splits, stock dividends, recapitalizations or the like);

(c) (i) One individual designated by Nestlé Health Science US Holdings, Inc. (“**Nestlé**”) and who is acceptable to the Board, such approval not to be

unreasonably withheld, who shall initially be Greg Behar, for so long as Nestlé and its Affiliates continue to own beneficially an aggregate of at least ninety percent (90%) of the shares of Series D Preferred Stock and Series D-1 Preferred Stock (or Series D Preferred Stock issued upon conversion thereof) purchased by Nestlé pursuant to the Purchase Agreement, and (ii) the Company shall ensure that such individual is, in the event of the Company's first underwritten public offering of its Common Stock under the Securities Act of 1933 (as amended, the "**Securities Act**"), designated by the Company to serve in the class of directors with terms that expire at the third annual meeting of stockholders held after such offering;

(d) The Company's Chief Executive Officer, who shall initially be Roger J. Pomerantz (the "**CEO Director**"), provided that if for any reason the CEO Director shall, after his or her initial election to the Board in his or her capacity as the CEO Director, cease to serve as the Chief Executive Officer of the Company, each of the Stockholders shall promptly vote their respective Shares (i) to remove the former Chief Executive Officer of the Company from the Board if such person has not resigned as a member of the Board and (ii) to elect such person's replacement as Chief Executive Officer of the Company as the new CEO Director; and

(e) Four individuals not otherwise Affiliates of the Company or of the Investors and who are not employees of the Company and who are designated by the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of the voting power of the outstanding shares of ABC Preferred Stock, who shall initially be Werner Cautreels, Peter Barton Hutt, Richard N. Kender and Lorence H. Kim.

To the extent that any of clauses (a) through (e) above shall not be applicable, any member of the Board who would otherwise have been designated in accordance with the terms thereof shall instead be voted upon by all the stockholders of the Company entitled to vote thereon in accordance with, and pursuant to, the Restated Certificate.

For purposes of this Agreement, an individual, firm, corporation, partnership, association, limited liability company, trust or any other entity (collectively, a "**Person**") shall be deemed an "**Affiliate**" of another Person who, directly or indirectly, controls, is controlled by or is under common control with such Person, including, without limitation, any general partner, managing member, officer or director of such Person or any venture capital or other investment fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company or investment advisor with, such Person.

1.3 Failure to Designate a Board Member. In the absence of any designation from the Persons or groups with the right to designate a director as specified above, the director previously designated by them and then serving shall be reelected if still eligible to serve as provided herein.

1.4 Removal of Board Members. Each Stockholder also agrees to vote, or cause to be voted, all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that:

(a) no director elected pursuant to Subsections 1.2 or 1.3 of this Agreement may be removed from office other than for cause unless (i) such removal is directed or approved by the affirmative vote of the Person entitled under Subsection 1.2 to designate that director or (ii) the Person(s) originally entitled to designate or approve such director or occupy such Board seat pursuant to Subsection 1.2 is no longer so entitled to designate or approve such director or occupy such Board seat;

(b) any vacancies created by the resignation, removal or death of a director elected pursuant to Subsections 1.2 or 1.3 shall be filled pursuant to the provisions of this Section 1; and

(c) upon the request of any party entitled to designate a director as provided in Subsection 1.2(a), Subsection 1.2(b) or Subsection 1.2(c) to remove such director, such director shall be removed.

All Stockholders agree to execute any written consents required to perform the obligations of this Agreement, and the Company agrees at the request of any party entitled to designate directors to call a special meeting of stockholders for the purpose of electing directors.

1.5 No Liability for Election of Recommended Directors. No Stockholder, nor any Affiliate of any Stockholder, shall have any liability as a result of designating a person for election as a director for any act or omission by such designated person in his or her capacity as a director of the Company, nor shall any Stockholder have any liability as a result of voting for any such designee in accordance with the provisions of this Agreement.

2. Vote to Increase Authorized Common Stock. Each Stockholder agrees to vote or cause to be voted all Shares owned by such Stockholder, or over which such Stockholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to increase the number of authorized shares of Common Stock from time to time to ensure that there will be sufficient shares of Common Stock available for conversion of all of the shares of Preferred Stock outstanding at any given time.

3. Drag-Along Right.

3.1 Definitions. A “**Sale of the Company**” shall mean either: (a) a transaction or series of related transactions in which a Person, or a group of related Persons, other than Affiliates of stockholders of the Company, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company (a “**Stock Sale**”); or (b) a transaction that qualifies as a “Deemed Liquidation Event” as defined in the Restated Certificate (a “**Deemed Liquidation Event**”).

3.2 **Actions to be Taken.** In the event that (i) the holders of shares of Preferred Stock representing a majority of the voting power of the outstanding shares of Preferred Stock (the “**Selling Investors**”) and (ii) the Board (collectively, the “**Electing Holders**”) approve a Sale of the Company in writing, specifying that this Section 3 shall apply to such transaction, then each Stockholder hereby agrees:

(a) if such transaction requires stockholder approval, with respect to all Shares that such Stockholder owns or over which such Stockholder otherwise exercises voting power, to vote (in person, by proxy or by action by written consent, as applicable) all Shares in favor of, and adopt, such Sale of the Company (together with any related amendment to the Restated Certificate required in order to implement such Sale of the Company) and to vote in opposition to any and all other proposals that could reasonably be expected to delay or impair the ability of the Company to consummate such Sale of the Company;

(b) if such transaction is a Stock Sale, to sell the same proportion of shares of capital stock of the Company beneficially held by such Stockholder as is being sold by the Selling Investors to the Person to whom the Selling Investors propose to sell their Shares, and, except as permitted in Subsection 3.3 below, on the same terms and conditions as the Selling Investors;

(c) to execute and deliver all related documentation and take such other action in support of the Sale of the Company as shall reasonably be requested by the Company or the Selling Investors in order to carry out the terms and provision of this Section 3, including without limitation executing and delivering instruments of conveyance and transfer, and any purchase agreement, merger agreement, indemnity agreement, escrow agreement, consent, waiver, governmental filing, share certificates duly endorsed for transfer (free and clear of impermissible liens, claims and encumbrances) and any similar or related documents;

(d) not to deposit, and to cause their Affiliates not to deposit, except as provided in this Agreement, any Shares of the Company owned by such party or Affiliate in a voting trust or subject any Shares to any arrangement or agreement with respect to the voting of such Shares, unless specifically requested to do so by the acquiror in connection with the Sale of the Company;

(e) to refrain from exercising any dissenters’ rights or rights of appraisal under applicable law at any time with respect to such Sale of the Company; and

(f) if the consideration to be paid in exchange for the Shares pursuant to this Section 3 includes any securities and due receipt thereof by any Stockholder would require under applicable law (x) the registration or qualification of such securities or of any person as a broker or dealer or agent with respect to such securities or (y) the provision to any Stockholder of any information other than such information as a prudent issuer would generally furnish in an offering made solely to “accredited investors” as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Stockholder in lieu thereof, against surrender of the Shares which would have otherwise been sold by such Stockholder, an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities which such Stockholder would otherwise receive as of the date of the issuance of such securities in exchange for the Shares.

3.3 **Exceptions.** Notwithstanding the foregoing, a Stockholder will not be required to comply with Subsection 3.2 above in connection with any proposed Sale of the Company (the “**Proposed Sale**”) unless:

(a) any representations and warranties to be made by such Stockholder in connection with the Proposed Sale are limited to representations and warranties related to authority, ownership and the ability to convey title to such Shares, including but not limited to representations and warranties that (i) the Stockholder holds all right, title and interest in and to the Shares such Stockholder purports to hold, free and clear of all liens and encumbrances, (ii) the obligations of the Stockholder in connection with the transaction have been duly authorized, if applicable, (iii) the documents to be entered into by the Stockholder have been duly executed by the Stockholder and delivered to the acquirer and are enforceable against the Stockholder in accordance with their respective terms and (iv) neither the execution and delivery of documents to be entered into in connection with the transaction, nor the performance of the Stockholder’s obligations thereunder, will cause a breach or violation of the terms of any agreement, law or judgment, order or decree of any court or governmental agency;

(b) the Stockholder shall not be liable for the inaccuracy of any representation or warranty made by any other Person in connection with the Proposed Sale, other than the Company (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders);

(c) the liability for indemnification, if any, of such Stockholder in the Proposed Sale and for the inaccuracy of any representations and warranties made by the Company or its Stockholders in connection with such Proposed Sale, is several and not joint with any other Person (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders), and, subject to the provisions of the Restated Certificate related to the allocation of the escrow, is pro rata in proportion to, and does not exceed, the amount of consideration paid to such Stockholder in connection with such Proposed Sale (in accordance with the provisions of the Restated Certificate);

(d) upon the consummation of the Proposed Sale, (i) each holder of each class or series of the Company’s stock will receive the same form of consideration for their shares of such class or series as is received by other holders in respect of their shares of such same class or series of stock, (ii) each holder of a series of Preferred Stock will receive the same amount of consideration per share of such series of Preferred Stock as is received by other holders in respect of their shares of such same series, (iii) each holder of Common Stock will receive the same amount of consideration per share of Common Stock as is received by other holders in respect of their shares of Common Stock, and (iv) unless the holders of shares of ABC Preferred Stock representing at least sixty percent (60%) of voting power of the ABC Preferred Stock elect to receive a lesser amount by written notice given to the Company at least ten (10) days prior to the effective date of any such Proposed Sale, the aggregate consideration receivable by all holders of the Preferred Stock and Common Stock shall be allocated among the holders of Preferred Stock and Common Stock on the basis of the relative liquidation preferences to which the holders of each respective series of Preferred Stock and the holders of Common Stock are entitled in a Deemed Liquidation Event (assuming for this purpose that the Proposed Sale is a Deemed Liquidation Event) in accordance with the Company’s Certificate of Incorporation in

effect immediately prior to the Proposed Sale; *provided, however*, that, notwithstanding the foregoing, if the consideration to be paid in exchange for the Key Holder Shares or Investor Shares, as applicable, pursuant to this Subsection 3.3(d) includes any securities and due receipt thereof by any Key Holder or Investor would require under applicable law (x) the registration or qualification of such securities or of any person as a broker or dealer or agent with respect to such securities or (y) the provision to any Key Holder or Investor of any information other than such information as a prudent issuer would generally furnish in an offering made solely to “accredited investors” as defined in Regulation D promulgated under the Securities Act, the Company may cause to be paid to any such Key Holder or Investor in lieu thereof, against surrender of the Key Holder Shares or Investor Shares, as applicable, which would have otherwise been sold by such Key Holder or Investor, an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities which such Key Holder or Investor would otherwise receive as of the date of the issuance of such securities in exchange for the Key Holder Shares or Investor Shares, as applicable; and

(e) subject to clause (d) above, requiring the same form of consideration to be available to the holders of any single class or series of capital stock, if any holders of any single class or series of capital stock of the Company are given an option as to the form and amount of consideration to be received as a result of the Proposed Sale, all holders of such class or series of capital stock will be given the same option; *provided, however*, that nothing in this Subsection 3.3(e) shall entitle any holder to receive any form of consideration that such holder would be ineligible to receive as a result of such holder’s failure to satisfy any condition, requirement or limitation that is generally applicable to the Company’s stockholders.

3.4 Restrictions on Sales of Control of the Company. No Stockholder shall be a party to any Stock Sale unless all holders of Preferred Stock are allowed to participate in such transaction and the consideration received pursuant to such transaction is allocated among the parties thereto in the manner specified in the Company’s Certificate of Incorporation in effect immediately prior to the Stock Sale (as if such transaction were a Deemed Liquidation Event), unless the holders of Preferred Stock representing a majority of the voting power of the Preferred Stock elect otherwise by written notice given to the Company at least ten (10) days prior to the effective date of any such transaction or series of related transactions.

4. Remedies.

4.1 Covenants of the Company. The Company agrees to use its best efforts, within the requirements of applicable law, to ensure that the rights granted under this Agreement are effective and that the parties enjoy the benefits of this Agreement. Such actions include, without limitation, the use of the Company’s best efforts to cause the nomination and election of the directors as provided in this Agreement.

4.2 Irrevocable Proxy and Power of Attorney. Each party to this Agreement (other than an Investor that, together with its Affiliates, originally purchased at least 400,000 shares of Series C Preferred Stock (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification) purchased from the Company pursuant to the Series C Preferred Stock Purchase Agreement, dated as of November 24, 2014, by and among the Company and the other parties named therein) hereby constitutes and appoints as the proxies of

the party and hereby grants a power of attorney to the President of the Company, and a designee of the Selling Investors, and each of them, with full power of substitution, with respect to the matters set forth herein, including without limitation, election of persons as members of the Board in accordance with Section 1 hereto, votes to increase authorized shares pursuant to Section 2 hereof and votes regarding any Sale of the Company pursuant to Section 3 hereof, and hereby authorizes each of them to represent and to vote, if and only if the party (i) fails to vote or (ii) attempts to vote (whether by proxy, in person or by written consent), in a manner which is inconsistent with the terms of this Agreement, all of such party's Shares in favor of the election of persons as members of the Board determined pursuant to and in accordance with the terms and provisions of this Agreement or the increase of authorized shares or approval of any Sale of the Company pursuant to and in accordance with the terms and provisions of Sections 2 and 3, respectively, of this Agreement or to take any action necessary to effect Sections 2 and 3, respectively, of this Agreement. Each of the proxy and power of attorney granted pursuant to the immediately preceding sentence is given in consideration of the agreements and covenants of the Company and the parties in connection with the transactions contemplated by this Agreement and, as such, each is coupled with an interest and shall be irrevocable unless and until this Agreement terminates or expires pursuant to Section 6 hereof. Each party hereto hereby revokes any and all previous proxies or powers of attorney with respect to the Shares and shall not hereafter, unless and until this Agreement terminates or expires pursuant to Section 6 hereof, purport to grant any other proxy or power of attorney with respect to any of the Shares, deposit any of the Shares into a voting trust or enter into any agreement (other than this Agreement), arrangement or understanding with any person, directly or indirectly, to vote, grant any proxy or give instructions with respect to the voting of any of the Shares, in each case, with respect to any of the matters set forth herein.

4.3 Specific Enforcement. Each party acknowledges and agrees that each party hereto will be irreparably damaged in the event any of the provisions of this Agreement are not performed by the parties in accordance with their specific terms or are otherwise breached. Accordingly, it is agreed that each of the Company and any Stockholder shall be entitled to an injunction to prevent breaches of this Agreement, and to specific enforcement of this Agreement and its terms and provisions in any action instituted in any court of the United States or any state having subject matter jurisdiction.

4.4 Remedies Cumulative. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

5. Bad Actor Matters.

5.1 Representation. Each Stockholder that is (or, as a result of its purchase of shares of Series D Preferred Stock or Series D-1 Preferred Stock under the Purchase Agreement, will become) a Person described in the first paragraph of Rule 506(d)(1) promulgated under the Securities Act (a "**Covered Person**"), hereby represents that none of the "Bad Actor" disqualifying events described in Rule 506(d)(1)(i) to (viii) promulgated under the Securities Act (a "Disqualification Event") is applicable to such Stockholder or any of its Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. For purposes of this Agreement, "Rule 506(d) Related Party" shall mean a person or entity that is a beneficial owner of such Stockholder's securities for purposes of Rule 506(d) of the Securities Act.

5.2 Covenant. Each Stockholder that is a Covered Person hereby agrees that it shall notify the Company promptly in writing in the event a Disqualification Event becomes applicable to such Stockholder (or any of its Rule 506(d) Related Parties), except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable.

6. Term. This Agreement shall be effective as of the date hereof and shall continue in effect until and shall terminate upon the earliest to occur of (a) the consummation of the Company's first underwritten public offering of its Common Stock (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to its stock option, stock purchase or similar plan or an SEC Rule 145 transaction); (b) the consummation of a Sale of the Company and distribution of proceeds to or escrow for the benefit of the Stockholders in accordance with the Restated Certificate, provided that the provisions of Section 3 hereof will continue after the closing of any Sale of the Company to the extent necessary to enforce the provisions of Section 3 with respect to such Sale of the Company; and (c) termination of this Agreement in accordance with Subsection 7.8 below.

7. Miscellaneous.

7.1 Additional Parties.

(a) Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of Preferred Stock after the date hereof, as a condition to the issuance of such shares the Company shall require that any purchaser of shares of Preferred Stock become a party to this Agreement by executing and delivering (i) the Adoption Agreement attached to this Agreement as Exhibit A, or (ii) a counterpart signature page hereto agreeing to be bound by and subject to the terms of this Agreement as an Investor and Stockholder hereunder. In either event, each such person shall thereafter be deemed an Investor and Stockholder for all purposes under this Agreement.

(b) In the event that after the date of this Agreement, the Company enters into an agreement with any Person to issue shares of capital stock to such Person (other than to a purchaser of Preferred Stock described in Subsection 7.1(a) above), following which such Person shall hold Shares constituting one percent (1%) or more of the Company's then outstanding capital stock (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised and/or converted or exchanged), then the Company shall cause such Person, as a condition precedent to entering into such agreement, to become a party to this Agreement by executing an Adoption Agreement in the form attached hereto as Exhibit A, agreeing to be bound by and subject to the terms of this Agreement as a Key Holder and Stockholder, and thereafter such person shall be deemed a Key Holder and Stockholder for all purposes under this Agreement.

7.2 Transfers. Each transferee or assignee of any Shares subject to this Agreement shall continue to be subject to the terms hereof, and, as a condition precedent to the

Company's recognizing such transfer, each transferee or assignee shall agree in writing to be subject to each of the terms of this Agreement by executing and delivering an Adoption Agreement substantially in the form attached hereto as Exhibit A. Upon the execution and delivery of an Adoption Agreement by any transferee, such transferee shall be deemed to be a party hereto as if such transferee were the transferor and such transferee's signature appeared on the signature pages of this Agreement and shall be deemed to be an Investor and Stockholder, or Key Holder and Stockholder, as applicable. The Company shall not permit the transfer of the Shares subject to this Agreement on its books or issue a new certificate representing any such Shares unless and until such transferee shall have complied with the terms of this Subsection 7.2. Each certificate representing the Shares subject to this Agreement if issued on or after the date of this Agreement shall be endorsed by the Company with the legend set forth in Subsection 7.12.

7.3 Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

7.4 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

7.5 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

7.6 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

7.7 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on Schedule A or Schedule B hereto, or to such email address, facsimile number or address as subsequently modified by written notice given in accordance with this Subsection 7.7. If notice is given to the Company, it shall be sent to 161 First Street, Suite 2C, Cambridge, MA 02142, Attention: Chief Executive Officer, and a copy shall also be sent to Latham & Watkins LLP, John Hancock Tower, 27th Floor, 20 Clarendon Street, Boston, MA 02116, Attention: Peter N. Handrinos, Esq.

7.8 Consent Required to Amend, Terminate or Waive. This Agreement may be amended or terminated and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only by a written instrument executed by (a) the Company; (b) the Key Holders holding a majority of the Shares then held by the Key Holders who are then providing services to the Company as officers, employees or consultants; and (c) the holders of a majority of the shares of Common Stock issued or issuable upon conversion of the shares of Preferred Stock held by the Investors (voting as a single class and on an as-converted basis). Notwithstanding the foregoing:

(a) this Agreement may not be amended or terminated and the observance of any term of this Agreement may not be waived with respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, termination or waiver applies to all Investors or Key Holders, as the case may be, in the same fashion;

(b) the consent of the Key Holders shall not be required for any amendment or waiver if such amendment or waiver either (A) is not directly applicable to the rights of the Key Holders hereunder or (B) does not adversely affect the rights of the Key Holders in a manner that is different than the effect on the rights of the other parties hereto;

(c) Schedules A and B hereto may be amended by the Company from time to time, without the consent of the other parties hereto, to add information regarding additional Investors and Key Holders in accordance with Subsections 7.1 and 7.2 hereof;

(d) any provision hereof may be waived by the waiving party on such party's own behalf, without the consent of any other party;

(e) neither Subsection 1.2(a) of this Agreement nor this Subsection 7.8(e) shall be amended or waived without the written consent of Flagship so long as it is entitled to designate a director under Subsection 1.2(a);

(f) neither Subsection 1.2(b) of this Agreement nor this Subsection 7.8(f) shall be amended or waived without the written consent of VentureLabs so long as it is entitled to designate a director under Subsection 1.2(b); and

(g) neither Subsection 1.2(c) of this Agreement nor this Subsection 7.8(g) shall be amended or waived without the written consent of Nestlé so long as it is entitled to designate a director under Subsection 1.2(c).

The Company shall give prompt written notice of any amendment, termination or waiver hereunder to any party that did not consent in writing thereto. Any amendment, termination or waiver effected in accordance with this Subsection 7.8 shall be binding on each party and all of such party's successors and permitted assigns, whether or not any such party, successor or assignee entered into or approved such amendment, termination or waiver; provided, however, that no amendment to this Agreement shall be binding on Nestlé or any of its Affiliates if such amendment (1) is not entered into or approved in writing by Nestlé or such Affiliate (provided that, for the avoidance of doubt, any such entry into or approval in writing that occurs through the exercise of any right or the enforcement of any obligation arising under Section 4 of that

certain Stock Purchase Agreement dated as of December 19, 2014, by and between Flagship VentureLabs IV LLC and Nestlé shall not be deemed for any purpose to constitute an entry into or an approval in writing by Nestlé or such Affiliate for this purpose) and (2)(i) imposes an obligation on Nestlé or such Affiliate that is unrelated to (x) the subject matter of this Agreement or the Purchase Agreement, or the transactions contemplated hereby or thereby, (y) Nestlé's investment in the Company or (z) Nestlé's ownership of securities of the Company or (ii) imposes any restriction on the conduct by Nestlé or any of its Affiliates of its business. For purposes of this Subsection 7.8, the requirement of a written instrument may be satisfied in the form of an action by written consent of the Stockholders circulated by the Company and executed by the Stockholder parties specified, whether or not such action by written consent makes explicit reference to the terms of this Agreement.

7.9 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default previously or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

7.10 Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

7.11 Entire Agreement. This Agreement (including the Schedules and Exhibits hereto) and the Restated Certificate constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

7.12 Legend on Share Certificates. Each certificate representing any Shares issued after the date hereof shall be endorsed by the Company with a legend reading substantially as follows:

“THE SHARES EVIDENCED HEREBY ARE SUBJECT TO A VOTING AGREEMENT, AS MAY BE AMENDED FROM TIME TO TIME, (A COPY OF WHICH MAY BE OBTAINED UPON WRITTEN REQUEST FROM THE COMPANY), AND BY ACCEPTING ANY INTEREST IN SUCH SHARES THE PERSON ACCEPTING SUCH INTEREST SHALL BE DEEMED TO AGREE TO AND SHALL BECOME BOUND BY ALL THE PROVISIONS OF THAT VOTING AGREEMENT, INCLUDING CERTAIN RESTRICTIONS ON TRANSFER AND OWNERSHIP SET FORTH THEREIN.”

The Company, by its execution of this Agreement, agrees that it will cause the certificates evidencing the Shares issued after the date hereof to bear the legend required by this Subsection 7.12 of this Agreement, and it shall supply, free of charge, a copy of this Agreement to any holder of a certificate evidencing Shares upon written request from such holder to the Company at its principal office. The parties to this Agreement do hereby agree that the failure to cause the certificates evidencing the Shares to bear the legend required by this Subsection 7.12 herein and/or the failure of the Company to supply, free of charge, a copy of this Agreement as provided hereunder shall not affect the validity or enforcement of this Agreement.

7.13 Stock Splits, Stock Dividends, etc. In the event of any issuance of Shares of the Company's voting securities hereafter to any of the Stockholders (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like), such Shares shall become subject to this Agreement and shall be endorsed with the legend set forth in Subsection 7.12.

7.14 Manner of Voting. The voting of Shares pursuant to this Agreement may be effected in person, by proxy, by written consent or in any other manner permitted by applicable law. For the avoidance of doubt, voting of the Shares pursuant to the Agreement need not make explicit reference to the terms of this Agreement.

7.15 Further Assurances. At any time or from time to time after the date hereof, the parties agree to cooperate with each other, and at the request of any other party, to execute and deliver any further instruments or documents and to take all such further action as the other party may reasonably request in order to evidence or effectuate the consummation of the transactions contemplated hereby and to otherwise carry out the intent of the parties hereunder.

7.16 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the Commonwealth of Massachusetts and to the jurisdiction of the United States District Court for the District of Massachusetts for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of the Commonwealth of Massachusetts or the United States District Court for the District of Massachusetts, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS

TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL

7.17 Aggregation of Stock. All Shares held or acquired by a Stockholder and/or its Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement, and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

7.18 Spousal Consent. If any individual Stockholder is a resident of Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, Washington, or Wisconsin, or the Commonwealth of Puerto Rico and is married on the date of this Agreement, such Stockholder's spouse shall execute and deliver to the Company a consent of spouse in the form of Exhibit B hereto ("**Consent of Spouse**"), effective on the date hereof. Notwithstanding the execution and delivery thereof, such consent shall not be deemed to confer or convey to the spouse any rights in such Stockholder's Shares that do not otherwise exist by operation of law or the agreement of the parties. If any individual Stockholder should marry or remarry subsequent to the date of this Agreement, such Stockholder shall within thirty (30) days thereafter obtain his/her new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement by causing such spouse to execute and deliver a Consent of Spouse acknowledging the restrictions and obligations contained in this Agreement and agreeing and consenting to the same.

7.19 Massachusetts Business Trust. A copy of the Agreement and Declaration of Trust of each Investor affiliated with Fidelity Management & Research Company is on file with the Secretary of State of the Commonwealth of Massachusetts and notice is hereby given that this Agreement is executed on behalf of the trustees of such Investor or any affiliate thereof as trustees and not individually and that the obligations of this Agreement are not binding on any of the trustees, officers or stockholders of such Investor or any affiliate thereof individually but are binding only upon such Investor or any affiliate thereof and its assets and property.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Voting Agreement as of the date first written above.

COMPANY:

SERES HEALTH, INC.

By: _____

Name: Roger J. Pomerantz, M.D.

Title: President and Chief Executive Officer

INVESTORS:

NESTLÉ HEALTH SCIENCE US HOLDINGS, INC.

By: _____

Name:

Title:

INVESTORS:

**FIDELITY SELECT PORTFOLIOS:
BIOTECHNOLOGY PORTFOLIO**

By:

Name:

Title:

INVESTORS:

**FIDELITY ADVISOR SERIES VII: FIDELITY
ADVISOR BIOTECHNOLOGY FUND**

By: _____
Name:
Title:

INVESTORS:

**FIDELITY GROWTH COMPANY COMMINGLED
POOL**

By: _____
Name:
Title:

INVESTORS:

**FIDELITY MT. VERNON STREET TRUST: FIDELITY
SERIES GROWTH COMPANY FUND**

By: _____
Name:
Title:

INVESTORS:

**FIDELITY MT. VERNON STREET TRUST: FIDELITY
GROWTH COMPANY FUND**

By: _____
Name:
Title:

INVESTORS:

ROCK SPRINGS CAPITAL MASTER FUND LP

By: Rock Springs GP LLC

Its: General Partner

By: _____

Name:

Title:

INVESTORS:

BLACKROCK HEALTH SCIENCES TRUST

By: BlackRock Advisors, LLC

Its: Investment Adviser

By: _____

Name:

Title:

INVESTORS:

**BLACKROCK HEALTH SCIENCES OPPORTUNITIES
PORTFOLIO, A SERIES OF BLACKROCK FUNDS**

By: BlackRock Advisors, LLC

Its: Investment Adviser

By: _____

Name:

Title:

INVESTORS:

**BLACKROCK HEALTH SCIENCES MASTER UNIT
TRUST**

By: BlackRock Capital Management, Inc.

Its: Investment Adviser

By: _____

Name:

Title:

INVESTORS:

LEERINK HOLDINGS LLC

By: _____

Name:

Title: Authorized Person

INVESTORS:

LEERINK SWANN CO-INVESTMENT FUND, LLC

By: _____

Name:

Title: Manager

INVESTORS:

SOFINNOVA VENTURE PARTNERS IX, L.P.

By: Sofinnova Management IX, L.L.C.
its General Partner

By: _____

Name: Srinivas Akkaraju

Title: Managing Member

INVESTORS:

T. Rowe Price Health Sciences Fund, Inc.
TD Mutual Funds – TD Health Sciences Fund
Valic Company I – Health Sciences Fund
T. Rowe Price Health Sciences Portfolio
John Hancock Variable Insurance Trust – Health Sciences Trust
John Hancock Funds II – Health Sciences Fund,
Each fund, severally and not jointly

By: T. ROWE PRICE ASSOCIATES, INC.,
Investment Adviser or Subadviser

By: _____
Name:
Title:

INVESTORS:

RA CAPITAL HEALTHCARE FUND, LP

By: _____
Name: Peter Kolchinsky
Title: Manager

INVESTORS:

ORBIMED PRIVATE INVESTMENTS V, LP

By: OrbiMed Capital GP V LLC, its General Partner

By: OrbiMed Advisors LLC, is Managing Member

By: _____

Name:

Title:

INVESTORS:

FLAGSHIP VENTURES FUND IV, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: _____
Manager

FLAGSHIP VENTURES FUND IV-Rx, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: _____
Manager

FLAGSHIP VENTURES FUND 2007, L.P.

By its General Partner
Flagship Ventures Fund 2007 General Partner LLC

By: _____
Manager

INVESTORS:

ENSO VENTURES 2 LIMITED
BY INTERLOCK DIRECTOR LTD., DIRECTOR

AUTHORIZED SIGNATORY

AUTHORIZED SIGNATORY

INVESTORS:

MAYO CLINIC

By: _____

Name:

Title:

INVESTORS:

ALEXANDRIA EQUITIES, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, INC., a
Maryland corporation, managing member

By: _____
Name:
Title:

INVESTORS:

Roger J. Pomerantz, M.D.

INVESTORS:

FAVREAU 2008 TRUST, DTD 4-10-2008

By: _____

Name: Jon Favreau

Title: Trustee

By: _____

Name: Joya Favreau

Title: Trustee

INVESTORS:

John Aunins

INVESTORS:

David Cook

INVESTORS:

Matthew Henn

KEY HOLDERS:

FLAGSHIP VENTURELABS IV LLC

By: FLAGSHIP VENTURES FUND IV, L.P.
its Authorized Member

By: FLAGSHIP VENTURES FUND IV
GENERAL PARTNER LLC
its General Partner

By: _____
Name:
Title:

KEY HOLDERS:

John Aunins

Alexander Belanger

David Berry

Frank Bobe

Michael Briskin

George Church

James Collins

Allison DiGaetano

Anthony D'Onofrio

Andrew Goodman

Matthew Henn

Peter Barton Hutt

Avak Kahvejian

Kim Lewis

Tohiro Ohsumi

David Relman

Geoffrey von Maltzahn

Han Zhang

SCHEDULE A

INVESTORS

Name and Address

Fidelity Select Portfolios: Biotechnology Portfolio
Brown Brothers Harriman & Co.
525 Washington Blvd
Jersey City NJ 07310
Attn: Michael Lerman 15th Floor
Corporate Actions
Email: michael.lerman@bbh.com
F: (617) 772-2418

Nestlé Health Science US Holdings, Inc.
900 Long Ridge Road, Building 2
Stamford, CT 06902
Attention: Andrew Glass, Esq.
Email: andrew.glass@us.nestle.com
F: (480) 379-5510

With a copy (which shall not constitute notice) to:

Nestlé Health Science S.A.
Avenue Nestlé, 55
1800 Vevey
Switzerland
Attention: Claudio Kuoni, Esq.
Email: Claudio.Kuoni@nestle.com
F: 41.21.924.2875

Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund
State Street Bank & Trust
PO Box 5756
Boston, Massachusetts 02206
Attn: Bangle & Co fbo Fidelity Advisor Series VII: Fidelity Advisor
Biotechnology Fund
Email: SSBCORP ACTIONS@StateStreet.com
F: (617) 988-9110

Leerink Swann Co-Investment Fund, LLC
1 Federal Street
Boston, MA 02110
Attention: General Counsel
F: (646) 499-7130

Fidelity Growth Company Commingled Pool
Brown Brothers Harriman & Co.
525 Washington Blvd
Jersey City NJ 07310
Attn: Michael Lerman 15th Floor
Corporate Actions
Email: michael.lerman@bbh.com
F: (617) 772-2418

Leerink Holdings LLC
1 Federal Street
Boston, MA 02110
Attention: General Counsel
F: (646) 499-7130

Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund
State Street Bank & Trust
PO Box 5756

T. Rowe Price Health Sciences Fund, Inc.
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202

Boston, Massachusetts 02206
Attn: WAVELENGTH + CO Fidelity Mt. Vernon Street Trust: Fidelity Series
Growth Company Fund
Email: SSBCORP ACTIONS@StateStreet.com
F: (617) 988-9110

Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund
Ball & Co
C/o Citibank N.A./Custody
IC&D Lock Box
P.O Box 7247-7057
Philadelphia, P.A 19170-7057
Account #: 206681
Email: fidelity.tpacd@citi.com
F: 813-604-1415

BlackRock Health Sciences Master Unit Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com, chian.jiang@blackrock.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

BlackRock Health Sciences Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com, chian.jiang@blackrock.com

Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

VALIC Company I - Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

VALIC Company I - Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

T. Rowe Price Health Sciences Portfolio
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

BlackRock Health Sciences Master Unit Trust
c/o BlackRock Advisors, LLC
Fundamental Equity – Global Opportunities Health & Sciences Team
60 State Street, 19th/20th Floors
Boston, MA 02109
Attn: Erin Xie, Chian Jiang
Email: erin.xie@blackrock.com, chian.jiang@blackrock.com

John Hancock Variable Insurance Trust - Health Sciences Trust
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

With a copy (which shall not constitute notice) to:

c/o BlackRock, Inc.
Office of the General Counsel
40 East 52nd Street
New York, NY 10022
Attn: David Maryles and Vincent Taurassi
Email: legaltransactions@blackrock.com

Sofinnova Venture Partners IX, L.P.
c/o Sofinnova Ventures, Inc.
Attention: Hooman Shahlavi
3000 Sand Hill Road, Bldg 4, Suite 250
Menlo Park, CA 94025

John Hancock Funds II - Health Sciences Fund
T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202
Attn: Andrew Baek, Vice President and Senior Legal Counsel
Phone: 410-345-2090
E-mail: andrew_baek@troweprice.com

OrbiMed Private Investments V, LP
c/o OrbiMed Advisors LLC
Attention: Evan Sotiriou
601 Lexington Ave.
54th Floor
New York, NY 10022

RA Capital Healthcare Fund, LP
c/o RA Capital Management, LLC,
Attention: Amanda Daniels
20 Park Plaza, Suite 1200
Boston, MA 02116
F: (617) 778-2510

Flagship Ventures Fund IV, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Flagship Ventures Fund IV-Rx, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Flagship Ventures Fund 2007, L.P.
c/o Flagship Ventures
One Memorial Drive
Cambridge, MA 02142
F: (617) 868 -1115

Enso Ventures 2 Limited
Suite C1
Hirzel Court
Hirzel Street
St Peter Port
Guernsey
Channel Islands
GY1 2NH
F: +44 (0) 1481 755859

Mayo Clinic
200 First Street SW
Rochester, MN 55905
F: (507) 538-7802

Alexandria Equities, LLC
385 E. Colorado Blvd. Suite 299
Pasadena, CA 91101
F: (626) 578-0770

Rock Springs Capital Master Fund LP
Attention: Evans Apeadu
650 South Exeter Street, Suite 1070
Baltimore, MD 21202
Email: evans@rockspringscapital.com

Roger J. Pomerantz, M.D.
XXXXXXXXXXXX
XXXXXXXXXXXX

Favreau 2008 Trust, dtd 4-10-2008
XXXXXXXXXXXX
XXXXXXXXXXXX
F: (310) 858-3947

John Aunins
XXXXXXXXXXXX
XXXXXXXXXXXX
F: (617) 945-0268

David Cook
XXXXXXXXXXXX
XXXXXXXXXXXX
F: (617) 945-0268

Matthew Henn
XXXXXXXXXXXX
XXXXXXXXXXXX
F: (617) 945-0268

SCHEDULE B

KEY HOLDERS

Name and Address

Flagship VentureLabs IV LLC
One Memorial Drive
Cambridge, MA 02142

Peter Barton Hutt
c/o Covington & Burling
1201 Pennsylvania Avenue NW
Washington, DC 20004

David Berry
XXXXXXXXXXXX
XXXXXXXXXXXX

Andrew Goodman
XXXXXXXXXXXX
XXXXXXXXXXXX

Alexander Belanger

Avak Kahvejian
XXXXXXXXXXXX
XXXXXXXXXXXX

Frank Bobe
XXXXXXXXXXXX
XXXXXXXXXXXX

Kim Lewis
XXXXXXXXXXXX
XXXXXXXXXXXX

Michael Briskin
XXXXXXXXXXXX
XXXXXXXXXXXX

John Aunins
XXXXXXXXXXXX
XXXXXXXXXXXX

George Church
XXXXXXXXXXXX
XXXXXXXXXXXX

Toshiro K. Ohsumi
XXXXXXXXXXXX
XXXXXXXXXXXX

James Collins
XXXXXXXXXXXX
XXXXXXXXXXXX

David Relman
XXXXXXXXXXXX
XXXXXXXXXXXX

Allison DiGaetano
XXXXXXXXXXXX
XXXXXXXXXXXX

Geoffrey von Maltzahn
XXXXXXXXXXXX
XXXXXXXXXXXX

Anthony D'Onofrio
XXXXXXXXXXXX
XXXXXXXXXXXX

Han Zhang
XXXXXXXXXXXX
XXXXXXXXXXXX

Matthew Henn
XXXXXXXXXXXX
XXXXXXXXXXXX

EXHIBIT A

ADOPTION AGREEMENT

This Adoption Agreement ("**Adoption Agreement**") is executed on _____, 20____, by the undersigned (the "**Holder**") pursuant to the terms of that certain Amended and Restated Voting Agreement dated as of December 19, 2014 (the "**Agreement**"), by and among the Company and certain of its Stockholders, as such Agreement may be amended or amended and restated hereafter. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, the Holder agrees as follows.

1.1 **Acknowledgement.** Holder acknowledges that Holder is acquiring certain shares of the capital stock of the Company (the "**Stock**") or options, warrants or other rights to purchase such Stock (the "**Options**"), for one of the following reasons (Check the correct box):

- as a transferee of Shares from a party in such party's capacity as an "Investor" bound by the Agreement, and after such transfer, Holder shall be considered an "Investor" and a "Stockholder" for all purposes of the Agreement.
- as a transferee of Shares from a party in such party's capacity as a "Key Holder" bound by the Agreement, and after such transfer, Holder shall be considered a "Key Holder" and a "Stockholder" for all purposes of the Agreement.
- as a new Investor in accordance with Subsection 7.1(a) of the Agreement, in which case Holder will be an "Investor" and a "Stockholder" for all purposes of the Agreement.
- in accordance with Subsection 7.1(b) of the Agreement, as a new party who is not a new Investor, in which case Holder will be a "Key Holder" and a "Stockholder" for all purposes of the Agreement.

1.2 **Agreement.** Holder hereby (a) agrees that the Stock, Options and any other shares of capital stock or securities required by the Agreement to be bound thereby, shall be bound by and subject to the terms of the Agreement and (b) adopts the Agreement with the same force and effect as if Holder were originally a party thereto.

1.3 **Notice.** Any notice required or permitted by the Agreement shall be given to Holder at the address or facsimile number listed below Holder's signature hereto.

HOLDER: _____

ACCEPTED AND AGREED:

By: _____
Name and Title of Signatory

SERES HEALTH, INC.

Address: _____

By: _____
Title: _____

Facsimile Number: _____

EXHIBIT B

CONSENT OF SPOUSE

I, [], spouse of [], acknowledge that I have read the Amended and Restated Voting Agreement, dated as of December 19, 2014, to which this Consent is attached as Exhibit B (the "Agreement"), and that I know the contents of the Agreement. I am aware that the Agreement contains provisions regarding the voting and transfer of shares of capital stock of the Company that my spouse may own, including any interest I might have therein.

I hereby agree that my interest, if any, in any shares of capital stock of the Company subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in such shares of capital stock of the Company shall be similarly bound by the Agreement.

I am aware that the legal, financial and related matters contained in the Agreement are complex and that I am free to seek independent professional guidance or counsel with respect to this Consent. I have either sought such guidance or counsel or determined after reviewing the Agreement carefully that I will waive such right.

Dated: _____

[Name of Key Holder's Spouse]

SUBSIDIARIES OF SERES THERAPEUTICS, INC.

Legal Name of Subsidiary

Seres Therapeutics Securities Corporation

Jurisdiction of Organization

Massachusetts

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in this Registration Statement on Form S-1 of Seres Therapeutics, Inc., formerly known as Seres Health, Inc., of our report dated April 8, 2015 relating to the consolidated financial statements of Seres Therapeutics, Inc., formerly known as Seres Health, Inc., which appears in such Registration Statement. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
May 27, 2015

John Hancock Tower, 27th Floor
200 Clarendon Street
Boston, Massachusetts 02116
Tel: +1.617.948.6000 Fax: +1.617.948.6001
www.lw.com

LATHAM & WATKINS LLP

FIRM / AFFILIATE OFFICES

Abu Dhabi	Milan
Barcelona	Moscow
Beijing	Munich
Boston	New Jersey
Brussels	New York
Chicago	Orange County
Doha	Paris
Dubai	Riyadh
Düsseldorf	Rome
Frankfurt	San Diego
Hamburg	San Francisco
Hong Kong	Shanghai
Houston	Silicon Valley
London	Singapore
Los Angeles	Tokyo
Madrid	Washington, D.C.

May 27, 2015

VIA EDGAR AND HAND DELIVERY

Mr. Jeffrey P. Riedler
Assistant Director
U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Mail Stop 3720
Washington, D.C. 20549

Re: Seres Therapeutics, Inc. Registration Statement on Form S-1 (CIK No. 0001609809)

Dear Mr. Riedler:

On behalf of Seres Therapeutics, Inc., formerly Seres Health, Inc., a Delaware corporation (the "**Company**"), we are transmitting this letter in response to comments received from the staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") by letter dated May 22, 2015 with respect to Amendment No. 3 to the Company's Draft Registration Statement on Form S-1 (the "**Draft Registration Statement**"). This letter is being submitted together with the Company's Registration Statement on Form S-1 filed on May 27, 2015 (the "**Registration Statement**"). The bold and numbered paragraph below corresponds to the numbered paragraph in the Staff's letter and is followed by the Company's response. For the Staff's convenience, we are also sending, by courier, copies of this letter and marked copies of the Registration Statement that reflect changes made to the Draft Registration Statement.

Clinical drug development involves a lengthy and expensive process...,page 16

Clinical development plan, page 99

1. **We refer to your risk factor disclosure in the first full paragraph on page 18 and the discussion of your clinical trials on pages 99-101. Please revise your disclosure to clarify:**
 - **that your prior plan was to conduct a Phase 2/3 study and the reasons for the change, including any input from the FDA;**

- whether you are still in discussions with the FDA regarding trial design and CMC requirements; and
- whether the FDA has approved the initiation of your planned Phase 2 clinical trial for SER-109.

If your discussions with the FDA concerning trial design are ongoing, please disclose the substance of any material feedback received and whether you believe these discussions may delay your planned initiation of patient dosing for the Phase 2 clinical trial scheduled for the second half of 2015.

The Company respectfully acknowledges the Staff's comment. Supplementally, the Company advises the Staff that drug development often involves an iterative process with the FDA involving repeated discussions to arrive at a clinical development plan, which once established, may nevertheless change as a drug candidate advances through clinical development. Over the past few months, the Company has engaged in several discussions with the FDA regarding the Phase 2 and Phase 3 clinical development plan for SER-109. The Company had originally proposed to the FDA a design for the next clinical trial for SER-109 consisting of a combined Phase 2/3 clinical trial. As a result of its subsequent discussions with the FDA, the Company determined that it would proceed with a Phase 2 clinical study for the next clinical trial for SER-109 and, using the data from that trial, would discuss with the FDA the protocol for a Phase 3 clinical trial. The Company has revised the Registration Statement throughout to reflect this current clinical development plan. The Company does not believe it is material to investors to describe the process by which it arrived at this development plan, particularly given that the current plan is consistent with a traditional drug development process. The Company further notes that the FDA has authorized the initiation of the Phase 2 clinical study and the Company dosed the first patient in the study on May 26, 2015. The Company has revised the Registration Statement throughout to provide this update.

Additionally, in regard to the Company's Phase 3 clinical trial of SER-109, the Company has revised the disclosure on pages 87, 99 and 101 to indicate that the Company plans to present the FDA with its proposed protocol for the Phase 3 clinical trial after it has obtained the results from the Phase 2 clinical study. With regards to CMC requirements, the disclosure also notes that the Company is currently planning to conduct pre-validation studies of its manufacturing process and expects to obtain sufficient data from those studies to commence the Phase 3 clinical trial.

LATHAM & WATKINS LLP

If you have any questions regarding the foregoing responses or the enclosed Registration Statement, please do not hesitate to contact me by telephone at (617) 948-6060.

Very truly yours,

/s/ Peter N. Handrinis

Peter N. Handrinis
of LATHAM & WATKINS LLP

cc: Roger J. Pomerantz, M.D., Seres Therapeutics, Inc.