
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13D

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No. __)*

Seres Therapeutics, Inc.
(Name of Issuer)

Common Stock, \$0.001 par value per share
(Title of Class of Securities)

81750R102
(CUSIP Number)

Noubar B. Afeyan, Ph.D.
Flagship Pioneering
55 Cambridge Parkway, Suite 800E
Cambridge, MA 02142
(617) 868-1888

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

June 18, 2019
(Date of Event Which Requires Filing of Statement on Schedule 13D)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), checking the following box.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(1)	Name of Reporting Persons: Flagship VentureLabs IV, LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 2,734,994
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 2,734,994
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 2,734,994	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 3.91%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Flagship Ventures Fund IV, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 10,757,414
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 10,757,414
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 10,757,414	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 15.39%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Flagship Ventures Fund IV-Rx, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 1,925,462
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 1,925,462
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 1,925,462	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 2.75%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Flagship Ventures Fund IV General Partner LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 12,682,876
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 12,682,876
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 12,682,876	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 18.14%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Nutritional Health LTP Fund, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 4,444,444
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 4,444,444
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 4,444,444	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 6.36%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Nutritional Health LTP Fund General Partner LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 4,444,444
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 4,444,444
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 4,444,444	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 6.36%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Flagship Pioneering Fund VI, L.P.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): WC	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 4,444,444
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 4,444,444
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 4,444,444	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 6.36%	
(14)	Type of Reporting Person (See Instructions): PN	

(1)	Name of Reporting Persons: Flagship Pioneering Fund VI General Partner LLC	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 4,444,444
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 4,444,444
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 4,444,444	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 6.36%	
(14)	Type of Reporting Person (See Instructions): OO	

(1)	Name of Reporting Persons: Flagship Pioneering, Inc.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 4,444,444
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 4,444,444
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 4,444,444	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 6.36%	
(14)	Type of Reporting Person (See Instructions): CO	

(1)	Name of Reporting Persons: Noubar B. Afeyan, Ph.D.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 21,646,905
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 21,646,905
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 21,646,905	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 30.96%	
(14)	Type of Reporting Person (See Instructions): IN	

(1)	Name of Reporting Persons: Edwin M. Kania, Jr.	
(2)	Check the Appropriate Box if a Member of a Group (See Instructions): (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC Use Only:	
(4)	Source of Funds (See Instructions): AF	
(5)	Check Box if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
(6)	Citizenship or Place of Organization: United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(7)	Sole Voting Power 0
	(8)	Shared Voting Power 12,682,876
	(9)	Sole Dispositive Power 0
	(10)	Shared Dispositive Power 12,682,876
(11)	Aggregate Amount Beneficially Owned by Each Reporting Person: 12,682,876	
(12)	Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions): <input type="checkbox"/>	
(13)	Percent of Class Represented by Amount in Row (11): 18.14%	
(14)	Type of Reporting Person (See Instructions): IN	

ITEM 1. SECURITY AND ISSUER

This Schedule 13D relates to the shares of common stock, \$0.001 par value per share (“Common Stock”), of Seres Therapeutics, Inc. (the “Issuer”). The address of the principal executive offices of the Issuer is 200 Sidney Street – 4th Floor, Cambridge, MA 02139. Certain of the Reporting Persons (as defined herein) previously filed a Schedule 13G, as amended, pursuant to Rule 13d-1(d) of the Securities Exchange Act of 1934, amended (the “Exchange Act”). This Schedule 13D is being filed as a result of shares of Common Stock acquired by certain other of the Reporting Persons in the Offering described in Item 6 hereof.

ITEM 2. IDENTITY AND BACKGROUND

This Schedule 13D is being filed by the following persons (each a “Reporting Person”):

- i. Flagship VentureLabs IV, LLC, a Delaware limited liability company (“VentureLabs IV”). The manager of VentureLabs IV is Flagship Ventures Fund IV, L.P., a Delaware limited partnership (“Flagship Fund IV”).
- ii. Flagship Fund IV. The general partner of Flagship Fund IV is Flagship Ventures Fund IV General Partner LLC, a Delaware limited liability company (“Flagship Fund IV GP”).
- iii. Flagship Ventures Fund IV-Rx, L.P., a Delaware limited partnership (“Flagship Fund IV-Rx” and together with VentureLabs IV and Flagship Fund IV, the “Flagship IV Funds”). The general partner of Flagship Fund IV-Rx is Flagship Fund IV GP.
- iv. Flagship Fund IV GP. Noubar B. Afeyan, Ph.D. (“Dr. Afeyan”) and Edwin M. Kania, Jr. (“Mr. Kania”) are the managers of Flagship Fund IV GP.
- v. Nutritional Health LTP Fund, L.P., a Delaware limited partnership (“Nutritional LTP”). The general partner of Nutritional LTP is Nutritional Health LTP General Partner LLC, a Delaware limited liability company (“Nutritional LTP GP”).
- vi. Nutritional LTP GP. Dr. Afeyan is the sole member and manager of Nutritional LTP GP.
- vii. Flagship Pioneering Fund VI, L.P., a Delaware limited partnership (“Flagship Fund VI” and together with the Flagship IV Funds and Nutritional LTP, the “Flagship Funds”). The general partner of Flagship Fund VI is Flagship Pioneering Fund VI General Partner LLC, a Delaware limited liability company (“Flagship Fund VI GP”).
- viii. Flagship Fund VI GP. The general partner of Flagship Fund VI GP is Flagship Pioneering, Inc., a Delaware corporation (“Flagship Pioneering”).
- ix. Flagship Pioneering. Dr. Afeyan is the CEO and sole shareholder of Flagship Pioneering.
- x. Dr. Afeyan, a citizen of the United States of America.
- xi. Mr. Kania, a citizen of the United States of America

The principal business of each Reporting Person is the venture capital investment business. The principal business address of each Reporting Person is 55 Cambridge Parkway, Suite 800E, Cambridge, Massachusetts 02142.

During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

During the last five years, none of the Reporting Persons has been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding were or are subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

The Flagship Funds purchased the shares set forth in Item 5 using funds from working capital. The Flagship Funds used an aggregate of approximately \$32,065,470 (including brokerage commissions) of such working capital to purchase the Common Stock reported in this Schedule 13D.

ITEM 4. PURPOSE OF TRANSACTION

On June 18, 2019, each of Flagship Fund VI and Nutritional LTP acquired 4,444,444 shares pursuant to an underwritten public offering of common stock by the Issuer (the "Offering"). The purchase price was \$2.25 per share.

The Reporting Persons acquired the shares of Common Stock set forth in Item 5 and hold their shares of Common Stock for investment purposes. Subject to a number of factors, including market conditions and their general investment and trading policies, the Reporting Persons may, in the ordinary course of their business, dispose of the shares of Common Stock that they beneficially own. These dispositions may occur in open market transactions, privately negotiated transactions or through other methods. Additionally, the Flagship Funds may distribute the shares of Common Stock that they directly hold to their respective limited partners.

Dr. Afeyan is a co-founder and director of the Issuer. The Reporting Persons, either directly or indirectly through Dr. Afeyan, may engage in discussions from time to time with the Issuer's board of directors, the Issuer's management or the Issuer's other stockholders. These discussions may be with respect to (i) acquiring or disposing shares of Common Stock or other securities of the Issuer (collectively, the "Securities"); (ii) maintaining or changing the Issuer's business, operations, governance, management, strategy or capitalization; or (iii) implementing transactions that may relate to or may result in any matter set forth in paragraphs (a) through (j) of Item 4 of Schedule 13D. Additionally, the Reporting Persons may acquire additional Securities through open market transactions, privately negotiated transactions or other methods.

The information set forth in Item 6 below is incorporated by reference in its entirety into this Item 4.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

(a)-(b) The information set forth in rows 7 through 13 of the cover pages to this Schedule 13D is incorporated by reference. The percentage set forth in row 13 is based on 69,913,410 outstanding shares of Common Stock as of June 18, 2019 consisting of the sum of (i) 41,094,832 shares of Common Stock outstanding as of March 31, 2019, (ii) 26,666,667 shares of Common Stock issued in the Offering and (iii) 2,151,911 shares of Common Stock issued as a result of the exercise by the underwriters of their over-allotment option, as set forth in the Issuer's prospectus supplement relating to the Offering filed with the Securities and Exchange Commission on June 14, 2019 (the "Prospectus Supplement").

VentureLabs IV, Flagship Fund IV and Flagship Fund IV-Rx directly hold 2,734,994 shares, 8,022,420 shares, and 1,925,462 shares of Common Stock, respectively. Flagship Fund IV, as the manager of VentureLabs IV, may be deemed to beneficially own the shares directly held by VentureLabs IV. Flagship Fund IV GP, as the general partner of the Flagship Fund IV Funds, may be deemed to beneficially own the shares directly held by the Flagship Fund IV Funds.

Nutritional LTP directly holds 4,444,444 shares of Common Stock. Nutritional LTP GP, as the general partner of Nutritional LTP, may be deemed to beneficially own the shares directly held by Nutritional LTP.

Flagship Fund VI directly holds 4,444,444 shares of Common Stock. Flagship Fund VI GP, as the general partner of Flagship Fund VI, may be deemed to beneficially own the shares directly held by Flagship Fund VI. Flagship Pioneering, as the general partner of Flagship Fund VI GP, may be deemed to beneficially own the shares directly held by Flagship Fund VI.

Dr. Afeyan and Mr. Kania, as the managers of Flagship Fund IV GP, may be deemed to beneficially own the shares directly held by the Flagship Fund IV Funds. While Mr. Kania is retired from Flagship Pioneering, he continues to serve as a manager of Flagship Fund IV GP. Dr. Afeyan, as the sole member and manager of Nutritional LTP GP and as CEO and sole shareholder of Flagship Pioneering, may be deemed to beneficially own the shares directly held by each of Nutritional LTP and Flagship Fund VI. In addition, Dr. Afeyan holds options to purchase an aggregate of 60,000 shares of Common Stock of the Issuer that are exercisable within 60 days of the date hereof received by him for his service as a director of the Issuer. Dr. Afeyan also holds 15,141 shares of Common Stock directly.

(c) On June 18, 2019, Nutritional LTP and Flagship Fund VI each purchased 4,444,444 shares of Common Stock in the Offering. The purchase price was \$2.25 per share.

(d) Except as described herein, no other person has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, securities covered by this statement.

(e) Not applicable

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER

Lock-Up Agreement

In connection with the Offering, the Issuer's officers and directors (including Dr. Afeyan) and certain stockholders, including the Flagship Funds (collectively, the "Lock-Up Parties"), entered into a lock-up agreement (the "Lock-Up Agreement") with Goldman Sachs & Co. LLC and Cowen and Company, LLC (the "Representatives"). Pursuant to the terms of the Lock-Up Agreement, the Lock-Up Parties have agreed, subject to specified exceptions, not to directly or indirectly: 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 Common Stock, or any options or warrants to purchase any shares of Common Stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of 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 Common Stock or any security convertible into or exercisable or exchangeable for Common Stock for a period of 90 days after the date of the Prospectus Supplement without the prior written consent of the Representatives.

The foregoing description of the Lock-Up Agreement is qualified in its entirety by reference to the full text of the Form of the Lock-Up Agreement, a copy of which is filed as Exhibit 2 hereto, and is incorporated by reference into this Item 6.

Registration Rights

One or more of the Flagship Funds are entitled to the following rights with respect to the registration of shares of Common Stock for public resale under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to an Amended and Restated Investors' Rights Agreement dated December 19, 2014 by and among the Issuer and certain of its stockholders (the "Investors' Rights Agreement"), until the rights 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.

Piggyback Registration Rights. Any time the Issuer proposes to register any shares of Common Stock under the Securities Act, subject to certain exceptions, the holders of registrable securities are entitled to notice of the registration and to include their shares of registrable securities in the registration. If the Issuer's 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 the Issuer 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 the Issuer is entitled under the Securities Act to register shares of Common Stock on a registration statement on Form S-3, the Issuer will be required to effect such registration.

Expenses. Ordinarily, other than underwriting discounts and commissions, the Issuer will be required to pay all expenses incurred by it 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 the Issuer's legal counsel and legal counsel for the selling security holders, and blue sky fees and expenses.

The foregoing description of the Investors' Rights Agreement is qualified in its entirety by reference to the full text of the Investors' Rights Agreement, a copy of which is filed as Exhibit 3 hereto, and is incorporated by reference into this Item 6.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

- Exhibit 1 Joint Filing Agreement (filed herewith).
- Exhibit 2 Form of Lock-Up Agreement between Goldman Sachs & Co. LLC and Cowen and Company, LLC and the stockholders signatory thereto (filed herewith).
- Exhibit 3 Amended and Restated Investors' Rights Agreement dated December 19, 2014 by and among the Issuer and certain of its stockholders (filed as Exhibit 4.1 to the Issuer's Annual Report on Form 10-K for the fiscal year ended December 31, 2018 and Registration Statement on Form S-1 (File No. 333-204484) filed with the Securities and Exchange Commission on May 27, 2015).

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information set forth in this Statement is true, complete and correct.

Dated: June 28, 2019

FLAGSHIP VENTURELABS IV, LLC

By: Flagship Ventures Fund IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV-Rx, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV GENERAL PARTNER
LLC

By: /s/ Noubar B. Afeyan, Ph.D.
Name: Noubar B. Afeyan, Ph.D.
Title: Manager

NUTRITIONAL HEALTH LTP FUND, L.P.

By: Nutritional Health LTP Fund General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.
Name: Noubar B. Afeyan, Ph.D.
Title: Manager

NUTRITIONAL HEALTH LTP FUND GENERAL
PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph.D.
Name: Noubar B. Afeyan, Ph.D.
Title: Manager

FLAGSHIP PIONEERING FUND VI, L.P.

By: Flagship Pioneering Fund VI General Partner LLC

By: Flagship Pioneering, Inc.

By: /s/ Noubar B. Afeyan, Ph.D.
Name: Noubar B. Afeyan, Ph.D.
Title: CEO

FLAGSHIP PIONEERING FUND VI GENERAL
PARTNER LLC

By: Flagship Pioneering, Inc.

By: /s/ Noubar B. Afeyan, Ph.D.
Name: Noubar B. Afeyan, Ph.D.
Title: CEO

FLAGSHIP PIONEERING, INC.

By: /s/ Noubar B. Afeyan, Ph.D.
Name: Noubar B. Afeyan, Ph.D.
Title: CEO

/s/ Noubar B. Afeyan, Ph.D.
NOUBAR B. AFEYAN, PH.D.

/s/ Edwin M. Kania, Jr.
EDWIN M. KANIA, JR.

JOINT FILING AGREEMENT

The persons below hereby agree that the Schedule 13D to which this agreement is attached as an exhibit, as well as all future amendments to such Schedule 13D, shall be filed jointly on behalf of each of them. This agreement is intended to satisfy the requirements of Rule 13d-1(k)(1)(iii) under the Securities Exchange Act of 1934.

Dated: June 28, 2019

FLAGSHIP VENTURELABS IV, LLC

By: Flagship Ventures Fund IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV-Rx, L.P.

By: Flagship Ventures Fund IV General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP VENTURES FUND IV GENERAL PARTNER
LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

NUTRITIONAL HEALTH LTP FUND, L.P.

By: Nutritional Health LTP Fund General Partner LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

NUTRITIONAL HEALTH LTP FUND GENERAL
PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph.D.

Name: Noubar B. Afeyan, Ph.D.

Title: Manager

FLAGSHIP PIONEERING FUND VI, L.P.

By: Flagship Pioneering Fund VI General Partner LLC

By: Flagship Pioneering, Inc.

By: /s/ Noubar B. Afeyan, Ph.D. _____

Name: Noubar B. Afeyan, Ph.D.

Title: CEO

FLAGSHIP PIONEERING FUND VI GENERAL
PARTNER LLC

By: Flagship Pioneering, Inc.

By: /s/ Noubar B. Afeyan, Ph.D. _____

Name: Noubar B. Afeyan, Ph.D.

Title: CEO

FLAGSHIP PIONEERING, INC.

By: /s/ Noubar B. Afeyan, Ph.D. _____

Name: Noubar B. Afeyan, Ph.D.

Title: CEO

/s/ Noubar B. Afeyan, Ph.D. _____

NOUBAR B. AFEYAN, PH.D.

/s/ Edwin M. Kania, Jr. _____

EDWIN M. KANIA, JR.

Form of Lock-Up Agreement

June 12, 2019

GOLDMAN SACHS & CO. LLC
COWEN AND COMPANY, LLC
As Representatives of
the several Underwriters to be named in
Schedule 1 to the Underwriting
Agreement referred to below

c/o Goldman Sachs & Co. LLC
200 West Street
New York, NY 10282

c/o Cowen and Company, LLC
599 Lexington Avenue
New York, New York 10022

Re: Seres Therapeutics, Inc. - Lock-Up Agreement

Ladies and Gentlemen:

The undersigned understands that Goldman Sachs & Co. LLC and Cowen and Company, LLC, as representatives (collectively, the "Representatives"), propose to enter into an Underwriting Agreement (the "Underwriting Agreement") on behalf of the several Underwriters to be named in Schedule I to such agreement (collectively, the "Underwriters"), with Seres Therapeutics, Inc., a Delaware corporation (the "Company"), providing for a public offering of shares of Common Stock (as defined below) of the Company (the "Shares") pursuant to a prospectus supplement to be filed with the Securities and Exchange Commission (the "Commission") relating to the Registration Statement on Form S-3 (No. 333-216735) (the "Prospectus") filed on March 16, 2017.

In consideration of the agreement by the Underwriters to offer and sell the Shares, and of other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the undersigned agrees that, during the period specified in the following paragraph (the "Lock-Up Period"), the undersigned will not offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of Common Stock, \$0.001 par value per share, of the Company ("Common Stock"), or any options or warrants to purchase any shares of Common Stock of the Company, or any securities convertible into, exchangeable for or that represent the right to receive shares of Common Stock of the Company, whether now owned or hereinafter acquired, owned directly by the undersigned (including holding as a custodian) or with respect to which the undersigned has beneficial ownership within the rules and regulations of the SEC (collectively the "Undersigned's Shares"). The foregoing restriction is expressly agreed to preclude the undersigned from engaging in any hedging or other transaction which is designed to or which reasonably could be expected to lead to or result in a sale or disposition of the Undersigned's Shares even if the Undersigned's Shares would be disposed of by someone other than the undersigned. Such prohibited hedging or other transactions would include without limitation any short sale or any purchase, sale or grant of any right (including without limitation any put or call option) with respect to any of the Undersigned's Shares or with respect to any security that includes, relates to, or derives any significant part of its value from such Shares. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any issuer-directed Shares the undersigned may purchase in the offering. The foregoing restriction shall not preclude the undersigned from exercising an option or other award granted under a stock incentive plan or stock purchase plan of the Company described in the Prospectus, from converting or exercising a warrant of the Company described in the Prospectus or from converting any convertible security of the Company described in the Prospectus, provided that any such shares of Common Stock received upon such exercise or conversion shall be subject to the terms of this Lock-Up Agreement. For the avoidance of doubt, the undersigned may (i) exercise any "piggy-back" registration rights as such rights may be applicable to offerings of the Company other than the offering of the Shares during the Lock-Up Period, or (ii) make a demand under any investor rights agreement or registration rights agreement with the Company for, and exercise its rights under any such agreements with respect to, the registration after the expiration of the Lock-Up Period of securities of the Company that do not require the filing of a registration statement during the Lock-Up Period.

The Lock-Up Period will commence on the date of this letter agreement (this "Lock-Up Agreement") and continue for 90 days after the public offering date set forth on the final prospectus (the "Prospectus") used to sell the Shares (the "Public Offering Date") pursuant to the Underwriting Agreement.

Notwithstanding the foregoing, the undersigned may transfer the Undersigned's Shares (i) as a *bona fide* gift or gifts, provided that the donee or donees thereof agree to be bound in writing by the restrictions set forth herein, (ii) to any member of the immediate family of the undersigned or any trust or other legal entity for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, provided that the transferee agrees to be bound in writing by the restrictions set forth herein, (iii) by will or intestacy, provided that the transferee agrees to be bound in writing by the restrictions set forth herein, (iv) to the Company upon the vesting or exercise of an option or other award granted under a stock incentive plan or stock purchase plan of the Company described in the Prospectus or the conversion or exercise of a warrant of the Company described in the Prospectus (in each case, by way of "net" exercise in accordance with their terms, and/or to cover withholding tax obligations in connection with such exercise, but for the avoidance of doubt, excluding all manners of exercise that would involve a sale to a third party of any securities, whether to cover the applicable aggregate exercise price, withholding tax obligations or otherwise), provided that any such shares of Common Stock received upon such vesting or exercise shall be subject to the terms of this Lock-Up Agreement, (v) pursuant to Section 10(a) of the Company's 2012 Stock Incentive Plan, as amended and as in effect on the date hereof, provided that any transferee agrees to be bound in writing by the restrictions set forth herein, (vi) with the prior written consent of each of the Representatives on behalf of the Underwriters, (vii) acquired in open market transactions on or after the Public Offering Date, (viii) as part of a distribution, transfer or disposition by the undersigned to its limited or general partners, members, stockholders or affiliates (as defined under Rule 12b-2 of the Exchange Act), provided that the transferee agrees to be bound in writing by the restrictions set forth herein and that any such transfer shall not involve a disposition for value, (ix) pursuant to any contractual arrangement described in the Prospectus in effect on the date of this Lock-Up Agreement that provides for the repurchase of the Undersigned's Shares by the Company in connection with the termination of the undersigned's employment or other service relationship with the Company or the undersigned's failure to meet certain conditions set out upon receipt of such Shares, (x) pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction involving a Change of Control of the Company and approved by the Company's board of directors, provided that, in the event that such Change of Control is not completed, the Undersigned's Shares shall remain subject to the restrictions contained in this Lock-Up Agreement and title to the Undersigned's Shares shall remain with the undersigned, and (xi) transfers of Common Stock by the Undersigned pursuant to any trading plan established pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), prior to the date hereof for the transfer of Common Stock (a "10b5-1 Plan"), which 10b5-1 Plan shall not be amended during the Lock-Up Period but may be terminated during the Lock-Up Period. In addition, (A) with respect to clauses (i), (ii), (v), (vii), and (viii) above, it shall be a condition to such transfer that no filing under the Exchange Act nor any other public filing or disclosure of such transfer by or on behalf of the undersigned, in each case reporting a reduction in beneficial ownership of Common Stock, shall be required or voluntarily made during the Lock-Up Period; (B) with respect to clause (iv), if the undersigned is required to file a report under the Exchange Act reporting a reduction in the undersigned's beneficial ownership of the Company's securities as a result of a disposition to satisfy tax withholding obligations, the undersigned shall include a statement in such report to the effect that the filing relates to the satisfaction of tax withholding obligations of the undersigned as a result of the exercise or vesting of equity awards of the Company held by the undersigned; and (C) with respect to clause (xi), if the undersigned is required to file a report under the Exchange Act, reporting a reduction in the undersigned's beneficial ownership of the Company's securities as a result of sales made under the undersigned's 10b5-1 Plan, the undersigned shall include a statement in such report to the effect that such sales are being made pursuant to the undersigned's 10b5-1 Plan established prior to the date hereof. Furthermore, nothing in this Lock-Up Agreement shall be deemed to prevent the undersigned from establishing a 10b5-1 Plan, provided that (x) such 10b5-1 Plan does not provide for the transfer of Common Stock during the Lock-Up Period and (y) no filing under the Exchange Act nor any other public filing or disclosure of any such action shall be required or voluntarily made by any person during the Lock-Up Period.

For purposes of this Lock-Up Agreement, “immediate family” shall mean any relationship by blood, domestic partnership, marriage or adoption, not more remote than first cousin. For the purposes of clause (x), “Change of Control” shall mean the transfer (whether by bona fide third party tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons, of the Company’s voting securities if, after such transfer, such person or group of affiliated persons would hold all of the outstanding voting securities of the Company (or the surviving entity). The undersigned now has, and, except as contemplated by clauses (i) through (xi) above, for the duration of this Lock-Up Agreement will have, good and marketable title to the Undersigned’s Shares, free and clear of all liens, encumbrances, and claims whatsoever, except those arising under securities laws. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company’s transfer agent and registrar against the transfer of the Undersigned’s Shares except in compliance with the foregoing restrictions.

The undersigned understands that the Company and the Underwriters are relying upon this Lock-Up Agreement in proceeding toward consummation of the offering. The undersigned further understands that this Lock-Up Agreement is irrevocable and shall be binding upon the undersigned’s heirs, legal representatives, successors, and assigns.

In the event that, during the Lock-Up Period, the Representatives on behalf of the Underwriters, waive any prohibition on the transfer of Shares held by any director or executive officer of the Company or any person or entity that beneficially owns 5% or more of the then outstanding Shares (measured as of the date of the Triggering Release (as defined below)) (a “Triggering Shareholder”) set forth in any lock-up agreement similar to this Lock-Up Agreement signed by such Triggering Shareholder (a “Triggering Release”), the Representatives shall be deemed to have also waived, on the same terms, the prohibitions set forth in this Lock-Up Agreement that would otherwise have applied to the undersigned with respect to the same percentage of the then outstanding Shares of the undersigned as the relative percentage of the then outstanding Shares being released in the Triggering Release represent with respect to the then outstanding Shares held by the Triggering Shareholder at the time of the request of the Triggering Release. The provisions of this paragraph will not apply: (1) unless and until the Representatives have first waived more than 1.0%, in the aggregate, of the Company’s total then outstanding Shares (assuming conversion, exercise and exchange of all securities convertible into or exercisable or exchangeable for Common Stock) from such prohibitions, (2) (a) if the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this Lock-Up Agreement to the extent and for the duration that such terms remain in effect at the time of the transfer, or (3) if the release or waiver is granted solely to allow a holder of Shares to participate as a selling stockholder in a follow-on public offering of such Shares pursuant to a registration statement on Form S-3 that is filed with the SEC, provided that the waiver to the undersigned will be limited to the undersigned’s participation in such follow-on public offering, and provided further that any Shares released for any holder but not sold in such offering are subject to this Lock-Up Agreement immediately following such follow-on offering. In the event that any percentage of such Shares released from the prohibitions set forth in this Lock-Up Agreement are subject to any restrictions of the type set forth in the second paragraph of this Lock-Up Agreement, the same restrictions shall be applicable to the release of the same percentage of the undersigned’s Shares. In the event that, as a result of this paragraph, any Shares held by the undersigned are released from the restrictions imposed by this Lock-Up Agreement, the Representatives shall use commercially reasonable efforts to notify the Company within two business days of the effective date of such release, and the Company, in turn, in consultation with the Representatives shall use commercially reasonable efforts to notify the undersigned within two business days thereafter that the same percentage of Shares held by the undersigned has been released; provided that the failure to give such notice to the Company or the undersigned shall not give rise to any claim or liability against the Company or the Underwriters, including the Representatives.

This Lock-Up Agreement (and for the avoidance of doubt, the Lock-Up Period described herein) and related restrictions shall automatically terminate upon the earliest to occur, if any, of (i) the Representatives, on behalf of the Underwriters, on the one hand, or the Company, on the other hand, advising the other in writing prior to the execution of the Underwriting Agreement that they have or it has determined not to proceed with the public offering contemplated by the Underwriting Agreement, (ii) the registration statement filed with the SEC with respect to the public offering contemplated by the Underwriting Agreement is withdrawn, (iii) the termination of the Underwriting Agreement (other than the provisions thereof which survive termination) before the sale of any Shares to the Underwriters or (iv) on June 30, 2019 (provided, however, that the Company may extend such date by up to three months with written notice to the undersigned prior thereto) if the Company is still pursuing the offering contemplated by the Underwriting Agreement, in the event the closing of the Public Offering Date shall not have occurred prior to such date.

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Very truly yours,

Flagship Ventures Fund IV, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: _____
Noubar B. Afeyan, Ph.D.
Its Manager

Flagship Ventures Fund IV-Rx, L.P.

By its General Partner
Flagship Ventures Fund IV General Partner LLC

By: _____
Noubar B. Afeyan, Ph.D.
Its Manager

Flagship VentureLabs IV LLC

By: Flagship Ventures Fund IV, L.P.
Its Manager and Class A Member

By: Flagship Ventures Fund IV General Partner LLC
Its General Partner

By: _____
Noubar B. Afeyan, Ph.D.
Its Manager