FORM 3

(First)

MA

(State)

1 MEMORIAL DRIVE, 7TH FLOOR

1. Name and Address of Reporting Person*
Flagship Ventures Fund IV, L.P.

(Street)

(City)

CAMBRIDGE

(Middle)

02142

(Zip)

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF

OMB APPROVAL

OMB Number: 3235-0104

Estimated average burden

				•	SECURITIES				hours per	r response: 0.	5
					16(a) of the Securities Exchange f the Investment Company Act of 1						
1. Name and Address of Reporting Person* <u>AFEYAN NOUBAR</u>			2. Date of Event Requiring Statement (Month/Day/Year) 06/25/2015		3. Issuer Name and Ticker or Trading Symbol Seres Therapeutics, Inc. [MCRB]						
(Last) (First) (Middle) 1 MEMORIAL DRIVE, 7TH FLOOR					4. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director X 10% Owner			5. If Amendment, Date of Original Filed (Month/Day/Year)			
(Street) CAMBRIDGE M	1A 02142				Officer (give title below)	Other (spe- below)	cify		cable Line) Form filed by Form filed by	/Group Filing (Check y One Reporting Persor y More than One	า
(City) (Si	tate) (Zip)								Reporting Po	erson	
			Table I - No	n-Deriva	tive Securities Beneficia	lly Owned					
1. Title of Security (Instr. 4)					2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownersh Form: Direct or Indirect ((Instr. 5)	ect (D) (Instr.		ture of Indirect Beneficial Ownership : 5)		
Common Stock					3,055,556	I	See F		ootnote ⁽¹⁾		
		(e			re Securities Beneficially ants, options, convertible		s)				
1. Title of Derivative Security (Instr. 4)			2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securit Underlying Derivative Securit	erlying Derivative Security (Instr. 4)		ersion ercise	5. Ownership Form: Direct (D)	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
			Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Price of Deriva Securi	tive	or Indirect (I) (Instr. 5)		
Series A Converti	ble Preferred Stock		(5)	(5)	Common Stock	6,105,362	(5	9)	I	See Footnote ⁽²⁾	
Series A Convertible Preferred Stock			(5)	(5)	Common Stock	1,526,338	(5)		I	See Footnote ⁽³⁾	
Series A Convertible Preferred Stock			(5)	(5)	Common Stock	599,297	(5)		I	See Footnote ⁽⁴⁾	
Series A-2 Convertible Preferred Stock			(5)	(5)	Common Stock	898,877	(5)		I	See Footnote ⁽²⁾	
Series A-2 Convertible Preferred Stock			(5)	(5)	Common Stock	224,719	(5)		I	See Footnote ⁽³⁾	
Series B Convertil	ble Preferred Stock		(5)	(5)	Common Stock	1,818,181	(5	5)	I	See Footnote ⁽²⁾	
Series B Convertil	ble Preferred Stock		(5)	(5)	Common Stock	454,546	(5	5)	I	See Footnote ⁽³⁾	
1. Name and Address AFEYAN NO	s of Reporting Person* <u>UBAR</u>			_							
(Last) 1 MEMORIAL D	(First) DRIVE, 7TH FLOOR	(Middle	e)								
(Street) CAMBRIDGE	MA	02142	!	_							
(City)	(State)	(Zip)									
	s of Reporting Person* ures Fund 2007. L	.P.									

(Last)	(First)	(Middle)						
1 MEMORIAL DI	RIVE, 7TH FLOOR							
(Street)								
CAMBRIDGE	MA	02142						
(City)	(State)	(Zip)						
1. Name and Address of Reporting Person* Flagship Ventures Fund IV-Rx, L.P.								
(Last) 1 MEMORIAL DI	(First) RIVE, 7TH FLOOR	(Middle)						
(Street) CAMBRIDGE	MA	02142						
(City)	(State)	(Zip)						
1. Name and Address Flagship Ventu	of Reporting Person* reLabs IV, LLC							
(Last) 1 MEMORIAL DI	(First) RIVE, 7TH FLOOR	(Middle)						
(Street) CAMBRIDGE	MA	02142						
(City)	(State)	(Zip)						
1. Name and Address of Reporting Person* Flagship Ventures 2007 General Partner LLC (Last) (First) (Middle)								
1 MEMORIAL DI	RIVE, 7TH FLOOR							
(Street) CAMBRIDGE	MA	02142						
(City)	(State)	(Zip)						
1. Name and Address of Reporting Person* Flagship Ventures Fund IV General Partner LLC								
(Last) 1 MEMORIAL DI	(First) RIVE, 7TH FLOOR	(Middle)						
(Street) CAMBRIDGE	MA	02142						
(City)	(State)	(Zip)						
1. Name and Address of Reporting Person* KANIA EDWIN M JR								
(Last) 1 MEMORIAL DI	(First) RIVE, 7TH FLOOR	(Middle)						
(Street) CAMBRIDGE	MA	02142						
(City)	(State)	(Zip)						

Explanation of Responses:

1. Held by Flagship VentureLabs IV LLC ("Flagship VentureLabs"). Flagship Ventures Fund IV, L.P. ("Flagship Fund IV") is a member of Flagship VentureLabs and also serves as its manager. Flagship Ventures Fund IV General Partner LLC ("Flagship Fund IV GP") is the general partner of Flagship Fund IV. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship Fund IV GP. Each of these individuals and entities may be deemed to share voting and investment power with respect to all shares held by Flagship VentureLabs. Each of the filing persons disclaims beneficial ownership of such shares except to the extent of his or its pecuniary interest therein.

^{2.} Held by Flagship Fund IV. Flagship Fund IV GP is the general partner of Flagship Fund IV. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship Fund IV GP and each of these individuals may be deemed to share voting and investment power with respect to all shares held by Flagship Fund IV. Each of the filing persons disclaims beneficial ownership of such shares except to the extent of his or its pecuniary interest therein.

^{3.} Held by Flagship Ventures Fund IV-Rx, L.P. ("Flagship IV-Rx"). Flagship Fund IV GP is the general partner of Flagship IV-Rx. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of

Flagship Fund IV GP. Flagship Fund IV GP and each of these individuals may be deemed to share voting and investment power with respect to all shares held by Flagship IV-Rx. Each of the filing persons disclaims beneficial ownership of such shares except to the extent of his or its pecuniary interest therein.

4. Held by Flagship Ventures Fund 2007, L.P. ("Flagship 2007"). Flagship Ventures 2007 General Partner LLC ("Flagship 2007 LLC") is the general partner of Flagship 2007. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship 2007 LLC. Flagship 2007 LLC and each of these individuals may be deemed to share voting and investment power with respect to all shares held by Flagship 2007. Each of the filing persons disclaims beneficial ownership of such shares except to the extent of his or its pecuniary interest therein.

5. Each class of preferred stock is convertible into Common Stock on a 1-for-1 basis upon the listing of the issuer's securities on The NASDAQ Global Select Exchange and has no expiration date.

Remarks:

NOUBAR B. AFEYAN, PH.D, 06/25/2015 /s/ Noubar Afeyan **FLAGSHIP VENTURES** FUND 2007, L.P., By: Flagship Ventures 2007 General Partner, 06/25/2015 LLC, By: /s/ Noubar Afeyan, Name: Noubar B. Afeyan, Title: Manager **FLAGSHIP VENTURES 2007** GENERAL PARTNER, LLC, By: /s/ Noubar Afeyan, Name: 06/25/2015 Noubar B. Afeyan, Title: Manager FLAGSHIP VENTURES FUND IV, L.P., By: Flagship Ventures Fund IV General 06/25/2015 Partner, LLC, By: /s/ Noubar Afeyan, Name: Noubar B. Afeyan, Title: Manager FLAGSHIP VENTURES **FUND IV GENERAL** 06/25/2015 PARTNER LLC, By: /s/ Noubar Afeyan, Name: Noubar B. Afeyan, Title: Manager FLAGSHIP VENTURES FUND IV-RX, L.P., By: Flagship Ventures 2007 06/25/2015 General Partner, LLC, By: /s/ Noubar Afeyan, Name: Noubar B. Afeyan, Title: Manager **FLAGSHIP VENTURELABS** IV, LLC, By: Flagship 06/25/2015 Ventures Fund IV General Partner LLC, By: /s/ Noubar <u>Afeyan</u> EDWIN M. KANIA, JR., /s/ 06/25/2015 Edwin Kania, Jr. ** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 5 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.