

FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * Flagship Ventures Fund IV, L.P.		2. Date of Event Requiring Statement (Month/Day/Year) 06/29/2016	3. Issuer Name and Ticker or Trading Symbol Syros Pharmaceuticals, Inc. [SYRS]	
(Last) 1 MEMORIAL DRIVE #7	(First) (Middle)		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)	
(Street) CAMBRIDGE, MA 02142		5. If Amendment, Date Original Filed(Month/Day/Year)		6. Individual or Joint/Group Filing(Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person
(City) (State) (Zip)	Table I - Non-Derivative Securities Beneficially Owned			

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Stock	213,332	I	See Footnote (5)

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

SEC 1473 (7-02)

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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series A-1 Preferred Stock	(1)	(1)	Common Stock	213,333 (6)	\$ (1)	I	See Footnote (6)
Series A-1 Preferred Stock	(1)	(1)	Common Stock	53,333 (7)	\$ (1)	I	See Footnote (7)
Series A-2 Preferred Stock	(2)	(2)	Common Stock	1,066,666 (6)	\$ (2)	I	See Footnote (6)
Series A-2 Preferred Stock	(2)	(2)	Common Stock	266,666 (7)	\$ (2)	I	See Footnote (7)
Series A-3 Preferred Stock	(3)	(3)	Common Stock	1,600,000 (6)	\$ (3)	I	See Footnote (6)
Series A-3 Preferred Stock	(3)	(3)	Common Stock	400,000 (7)	\$ (3)	I	See Footnote (7)
Series B Preferred Stock	(4)	(4)	Common Stock	474,661 (6)	\$ (4)	I	See Footnote (6)
Series B Preferred Stock	(4)	(4)	Common Stock	118,665 (7)	\$ (4)	I	See Footnote (7)

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Flagship Ventures Fund IV, L.P. 1 MEMORIAL DRIVE #7 CAMBRIDGE, MA 02142		X		
Flagship Ventures Fund IV-Rx, L.P. 1 MEMORIAL DRIVE #7 CAMBRIDGE, MA 02142		X		
Flagship VentureLabs IV, LLC 1 MEMORIAL DRIVE #7 CAMBRIDGE, MA 02142		X		
Flagship Ventures Fund IV General Partner LLC 1 MEMORIAL DRIVE #7 CAMBRIDGE, MA 02142		X		
AFEYAN NOUBAR 1 MEMORIAL DRIVE #7 CAMBRIDGE, MA 02142		X		
KANIA EDWIN M JR 1 MEMORIAL DRIVE #7 CAMBRIDGE, MA 02142		X		

Signatures

FLAGSHIP VENTURES FUND IV, L.P. By: Flagship Ventures Fund IV General Partner LLC By: /s/ Noubar Afeyan Name: Noubar B. Afeyan, Ph.D. Title: Manager		06/29/2016
** Signature of Reporting Person		Date
FLAGSHIP VENTURES FUND IV-RX, L.P. By: Flagship Ventures Fund IV General Partner LLC By: /s/ Noubar Afeyan Name: Noubar B. Afeyan, Ph.D. Title: Manager		06/29/2016
** Signature of Reporting Person		Date
FLAGSHIP VENTURELABS IV, LLC By: Flagship Ventures Fund IV, L.P. By: Flagship Ventures Fund IV General Partner LLC By: /s/ Noubar Afeyan Name: Noubar B. Afeyan, Ph.D. Title: Manager		06/29/2016
** Signature of Reporting Person		Date
FLAGSHIP VENTURES FUND IV GENERAL PARTNER LLC By: /s/ Noubar Afeyan Name: Noubar B. Afeyan, Ph.D. Title: Manager		06/29/2016
** Signature of Reporting Person		Date
/s/ Noubar Afeyan NOUBAR B. AFEYAN, PH.D.		06/29/2016
** Signature of Reporting Person		Date
/s/ Edwin Kania EDWIN M. KANIA, JR.		06/29/2016
** Signature of Reporting Person		Date

Explanation of Responses:

* 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).

The Series A-1 Preferred Stock is convertible into Common Stock on a 3.75-for-one basis into the number of shares shown in column 3 (1) at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering without payment of further

consideration. The shares have no expiration date.

The Series A-2 Preferred Stock is convertible into Common Stock on a 3.75-for-one basis into the number of shares shown in column 3 at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering without payment of further consideration. The shares have no expiration date.

The Series A-3 Preferred Stock is convertible into Common Stock on a 3.75-for-one basis into the number of shares shown in column 3 at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering without payment of further consideration. The shares have no expiration date.

The Series B Preferred Stock is convertible into Common Stock on a 3.75-for-one basis into the number of shares shown in column 3 at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering without payment of further consideration. The shares have no expiration date.

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

Held by Flagship IV. Flagship IV LLC is the general partner of Flagship IV. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship IV LLC. Flagship IV LLC and each of these individuals may be deemed to share voting and investment power with respect to all shares held by Flagship IV. Each of the filing persons other than Flagship IV disclaims beneficial ownership of the shares except to the extent of his or its pecuniary interest therein. Stephane Bancel, a director of the Issuer, is a limited partner of Flagship IV and a member of Flagship IV LLC. Mr. Bancel disclaims beneficial ownership of the shares except to the extent of his pecuniary interest therein.

Held by Flagship Ventures Fund IV-Rx, L.P. ("Flagship IV-Rx"). Flagship IV LLC is the general partner of Flagship IV-Rx. Noubar B. Afeyan, Ph.D. and Edwin M. Kania, Jr. are the managers of Flagship IV LLC. Flagship IV LLC 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 other than Flagship IV-Rx disclaims beneficial ownership of the shares except to the extent of his or its pecuniary interest therein. Stephane Bancel, a director of the Issuer, is a member of Flagship IV LLC. Mr. Bancel disclaims beneficial ownership of the shares except to the extent of his pecuniary interest therein.

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

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