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

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

(Print or Type Responses)

STATEMENT OF CHANGES IN 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

1. Name and Address of Reporting Person Flagship Ventures Fund IV, L.P.	Issuer Name and Syros Pharmaceur						5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director X 10% Owner								
1 MEMORIAL DRIVE #7	3. Date of Earliest To 07/06/2016	ransaction (Mont	h/Day/Year)			Officer (give title below) Other (specify below)								
(Street)	4. If Amendment, Da	ate Original	Filed	(Month/Day/Yea	nr)	Form filed by One Reporting Person	idual or Joint/Group Filing(Check Applicable Line) filed by One Reporting Person sposed of, or Beneficially Owned sunt of Securities Beneficially Following Reported ction(s) S and 4) See 33 I See Footnote (5) See 9999 I Footnote (5) See								
CAMBRIDGE, MA 02142 (City) (State)								Check all applicable) Director							
	(Zip)							· · · · · · · · · · · · · · · · · · ·	policable) X_10% Owner Other (specify below) Ing(Check Applicable Line) Ing Person Ownership Form: Direct (D) or Indirect (I) (Instr. 4) See I						
1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transact Code (Instr. 8)	ion	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	Ownership Form:	of Indirect Beneficial					
		(A) or				Price	or Indirect (Instr. (I) (Instr. 4)								
Common Stock	07/06/2016		С		213,333 (5)	A	<u>(1)</u>	213,333	I	Footnote					
Common Stock	07/06/2016		С		53,333 (6)	A	(1)	53,333	I	Footnote					
Common Stock	07/06/2016		С		1,066,666 (5)	A	<u>(2)</u>	1,279,999	I	Footnote					
Common Stock	07/06/2016		С		266,666 (6)	A	<u>(2)</u>	319,999	I	Footnote					
Common Stock	07/06/2016		С		1,600,000 (5)	A	<u>(3)</u>	2,879,999	I	Footnote					
Common Stock	07/06/2016		С		400,000 (6)	A	<u>(3)</u>	719,999	I	Footnote					
Common Stock	07/06/2016		С		474,661 (5)	A	<u>(4)</u>	3,354,660	I	Footnote					
Common Stock	07/06/2016		С		118,665 (6)	A	<u>(4)</u>	838,664	I	Footnote					
Common Stock	07/06/2016		P		320,000 (<u>5</u>)	A	\$ 12.5	3,674,660	I	Footnote					
Common Stock	07/06/2016		P		80,000 (6)	A	\$ 12.5	918,664	I	Footnote					
Common Stock								213,332	I	Footnote					
Reminder: Report on a separate line for ea	ch class of securities	beneficially owned o		Person	ons who re	not re	quire	e collection of information conta d to respond unless the form MB control number.	ined SEC	1474 (9-02)					

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

S	Security Instr. 3)	Conversion		3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaci Code	tion	5. Number of Derivative		and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		Security (Instr. 5) Securities Beneficially Owned		Ownership Form of Derivative	11. Nature of Indirect Beneficial Ownership (Instr. 4)
		security			Code		(A)		Date Exercisable	Expiration Date		Amount or Number of Shares		Reported Transaction(s)	or Indirect	
1 F	Series A- Preferred Stock	(I)	07/06/2016		С			800,000	(1)	<u>(1)</u>	Common Stock	213,333 (5)	\$ 0	0	I	See Footnote
S	Series A-															

1 Preferred Stock	(1)	07/06/2016	С	200,000	(1)	(1)	Common Stock	53,333 (6)	\$ 0	0	I	See Footnote (6)
Series A- 2 Preferred Stock	<u>(2)</u>	07/06/2016	С	4,000,000	(2)	<u>(2)</u>	Common Stock	1,066,666 (5)	\$ 0	0	I	See Footnote
Series A- 2 Preferred Stock	<u>(2)</u>	07/06/2016	С	1,000,000	(2)	<u>(2)</u>	Common Stock	266,666 <u>(6)</u>	\$ 0	0	I	See Footnote
Series A- 3 Preferred Stock	<u>(3)</u>	07/06/2016	С	6,000,000	(3)	(3)	Common Stock	1,600,000 (5)	\$ 0	0	I	See Footnote
Series A- 3 Preferred Stock	<u>(3)</u>	07/06/2016	С	1,500,000	(3)	(3)	Common Stock	400,000	\$ 0	0	I	See Footnote
Series B Preferred Stock	<u>(4)</u>	07/06/2016	С	1,779,981	<u>(4)</u>	<u>(4)</u>	Common Stock	474,661 (5)	\$ 0	0	I	See Footnote (5)
Series B Preferred Stock	<u>(4)</u>	07/06/2016	С	444,995	<u>(4)</u>	<u>(4)</u>	Common Stock	118,665 (6)	\$ 0	0	I	See Footnote (6)

Reporting Owners

Barrandina Carran Nama / Addinas	Relationships							
Reporting Owner Name / Address	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 B. Afeyan Name:Noubar B. Afeyan, Ph.D. Title: Manager		07/06/2016					
-*Signature of Reporting Person							
FLAGSHIP VENTURES FUND IV-RX, L.P. By: Flagship Ventures Fund IV General Partner LLC By: /s/ Noubar B. Afeyan Name: Noubar B. Afeyan, Ph.D. Title: Manager **Signature of Reporting Person		07/06/2016					
FLAGSHIP VENTURELABS IV, LLC By: Flagship Ventures Fund IV, L.P. By: Flagship Ventures Fund IV General Partner LLC By: /s/ Noubar B. Afeyan Name: Noubar B. Afeyan, Ph.D. Title: Manager		07/06/2016					
-Signature of Reporting Person							
FLAGSHIP VENTURES FUND IV GENERAL PARTNER LLC By: /s/ Noubar B. Afeyan Name: Noubar B. Afeyan, Ph.D. Title: Manager		07/06/2016					
**Signature of Reporting Person		Date					
/s/ Noubar B. Afeyan NOUBAR B. AFEYAN, PH.D.		07/06/2016					
Signature of Reporting Person		Date					
/s/ Edwin M. Kania, Jr. EDWIN M. KANIA, JR.		07/06/2016					
-*Signature of Reporting Person		Date					

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(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).
- (1) The Series A-1 Preferred Stock converted into Common Stock on a 3.75-for-one basis upon the closing of the Issuer's initial public offering without payment of consideration. The Series A-1 Preferred Stock was convertible at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares had no expiration date.
- (2) The Series A-2 Preferred Stock converted into Common Stock on a 3.75-for-one basis upon the closing of the Issuer's initial public offering without payment of consideration. The Series A-2 Preferred Stock was convertible at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares had no expiration date.
- (3) The Series A-3 Preferred Stock converted into Common Stock on a 3.75-for-one basis upon the closing of the Issuer's initial public offering without payment of consideration. The Series A-3 Preferred Stock was convertible at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares had no expiration date.
- The Series B Preferred Stock converted into Common Stock on a 3.75-for-one basis upon the closing of the Issuer's initial public offering without payment of consideration. The Series B Preferred Stock was convertible at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares had no expiration date.
 - Held by Flagship Ventures Fund IV, L.P. ("Flagship 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 LLC and each of these individuals may be deemed to share voting and investment power with
- (5) 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.
- Held by Flagship VentureLabs IV, LLC ("VentureLabs IV"). Flagship IV is the manager of VentureLabs 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, Flagship IV LLC and each of these individuals may be deemed to share voting and investment power
- (7) 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.

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

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