

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
OMB Number:	3235-0104
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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* <u>Flagship Ventures Fund 2007, L.P.</u> <hr/> (Last) (First) (Middle) 1 MEMORIAL DRIVE, 7TH FLOOR <hr/> (Street) CAMBRIDGE MA 02142 <hr/> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 02/05/2014	3. Issuer Name and Ticker or Trading Symbol <u>Eleven Biotherapeutics, Inc. [ EBIO ]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year)  6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person

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	275,590 <sup>(1)</sup>	D	
Common Stock	115,410 <sup>(2)</sup>	D	
Common Stock	28,852 <sup>(3)</sup>	D	

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: 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 Convertible Preferred Stock	(4)	(5)	Common Stock	1,417,323 <sup>(1)(4)</sup>	(4)	D	
Series A Convertible Preferred Stock	(4)	(5)	Common Stock	661,417 <sup>(2)(4)</sup>	(4)	D	
Series A Convertible Preferred Stock	(4)	(5)	Common Stock	165,354 <sup>(3)(4)</sup>	(4)	D	
Series B Convertible Preferred Stock	(4)	(5)	Common Stock	264,600 <sup>(2)(4)</sup>	(4)	D	
Series B Convertible Preferred Stock	(4)	(5)	Common Stock	66,150 <sup>(3)(4)</sup>	(4)	D	

1. Name and Address of Reporting Person\*  
Flagship Ventures Fund 2007, L.P.  


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 (Last) (First) (Middle)  
 1 MEMORIAL DRIVE, 7TH FLOOR  


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 (Street)  
 CAMBRIDGE MA 02142  


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 (City) (State) (Zip)

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


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 (Last) (First) (Middle)  
 1 MEMORIAL DRIVE  


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 (Street)  
 CAMBRIDGE MA 02142  


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 (City) (State) (Zip)

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


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 (Last) (First) (Middle)  
 (Street)  
 (City) (State) (Zip)

(Last) (First) (Middle)  
1 MEMORIAL DRIVE, 7TH FLOOR

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(Street)  
CAMBRIDGE MA 02142

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(City) (State) (Zip)

1. Name and Address of Reporting Person\*  
Flagship Ventures 2007 General Partner LLC

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(Last) (First) (Middle)  
1 MEMORIAL DRIVE, 7TH FLOOR

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(Street)  
CAMBRIDGE MA 02142

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(City) (State) (Zip)

1. Name and Address of Reporting Person\*  
Flagship Ventures Fund IV General Partner LLC

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(Last) (First) (Middle)  
1 MEMORIAL DRIVE, 7TH FLOOR

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(Street)  
CAMBRIDGE MA 02142

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(City) (State) (Zip)

1. Name and Address of Reporting Person\*  
AFEYAN NOUBAR

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(Last) (First) (Middle)  
C/O ELEVEN BIOTHERAPEUTICS, INC.  
215 FIRST STREET, SUITE 400

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(Street)  
CAMBRIDGE MA 02142

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(City) (State) (Zip)

1. Name and Address of Reporting Person\*  
KANIA EDWIN M JR

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(Last) (First) (Middle)  
1 MEMORIAL DRIVE, 7TH FLOOR

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(Street)  
CAMBRIDGE MA 02142

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(City) (State) (Zip)

**Explanation of Responses:**

1. 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 the shares except to the extent of his or its pecuniary interest therein. Mr. Afeyan is a member of the Issuer's board of directors and is filing a separate Form 3 concurrently herewith.
2. 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 respect to all shares held by Flagship IV. Each of the filing persons disclaims beneficial ownership of the shares except to the extent of his or its pecuniary interest therein. Mr. Afeyan is a member of the Issuer's board of directors and is filing a separate Form 3 concurrently herewith.
3. Held by Flagship Ventures Fund IV-Rx, L.P. ("Flagship IV-Rx"). Flagship Ventures Fund IV General Partner LLC ("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 disclaims beneficial ownership of the shares except to the extent of his or its pecuniary interest therein. Mr. Afeyan is a member of the Issuer's board of directors and is filing a separate Form 3 concurrently herewith.
4. Convertible into Common Stock on a 1-for-6.35 basis without payment of further consideration. Each share will automatically convert into 1/6.35 of a share of Common Stock upon the closing of the Issuer's initial public offering.
5. Not applicable.

FLAGSHIP VENTURES 02/05/2014  
FUND 2007, L.P., By: Flagship  
Ventures 2007 General Partner  
LLC, By: /s/ Noubar B.  
Afeyan, Ph.D., Name: Noubar

B. Afeyan, Ph.D., Title:  
Manager  
FLAGSHIP VENTURES 2007  
GENERAL PARTNER LLC,  
L.P., By: /s/ Noubar B. Afeyan, 02/05/2014  
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. 02/05/2014  
Afeyan, Ph.D., Name: Noubar  
B. Afeyan, Ph.D., Title:  
Manager  
FLAGSHIP VENTURES  
FUND IV GENERAL  
PARTNER LLC, By: /s/ 02/05/2014  
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/ 02/05/2014  
Noubar B. Afeyan, Ph.D.,  
Name: Noubar B. Afeyan,  
Ph.D., Title: Manager  
/s/ Noubar B. Afeyan, Ph.D., 02/05/2014  
NOUBAR B. AFEYAN, PH.D.  
/s/ Edwin M. Kania, Jr., 02/05/2014  
EDWIN M. 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.**