FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

| OMB APPROVAL | | | | | | | |
|--------------------------|-----|--|--|--|--|--|--|
| OMB Number: | | | | | | | |
| Estimated average burden | | | | | | | |
| hours per response: | 0.5 | | | | | | |

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* AFEYAN NOUBAR | 2. Date of Event Requiring Stater (Month/Day/Year 02/05/2014 | nent | 3. Issuer Name and Ticker or Trading Symbol Eleven Biotherapeutics, Inc. [EBIO] | | | | | | |
|--|---|--|---|---|-----------------------|--|---|---|--|
| (Last) (First) (Middle) C/O ELEVEN BIOTHERAPEUTICS, INC. | | | Relationship of Reporting Person((Check all applicable) X Director | | on(s) to Issuer | | 5. If Amendment, Date of Original Filed (Month/Day/Year) | | |
| 215 FIRST STREET, SUITE 400 | | | | | Other (specify below) | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | |
| (Street) CAMBRIDGE MA 02142 | | | | | | | | y One Reporting Person y More than One erson | |
| (City) (State) (Zip) | | | | | | | | | |
| | Table I - Nor | -Derivati | ive Securitie | s Beneficiall | y 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) | | | |
| No securities are beneficially owned | | 0(1 | 1 | D | | | | | |
| | | | | | | | | | |
| (6 | Table II - D g., puts, cal | | e Securities nts, options | | | s) | | | |
| 1. Title of Derivative Security (Instr. 4) | | is, warrar | nts, options 3. Title and A | | securities | 4. Convers | ise Form: | 6. Nature of Indirect Beneficial Ownership (Instr. 5) | |

Explanation of Responses:

1. Mr. Afeyan does not own shares in his individual capacity. He is a manager of Flagship Ventures 2007 General Partner LLC ("Fund 2007 GP"), the sole general partner of Flagship Ventures Fund IV General Partner LLC ("Fund IV GP"), the sole general partner of each of Flagship Ventures Fund IV, L.P. ("Flagship 2007"), and a manager of Flagship Ventures Fund IV General Partner LLC ("Fund IV GP"), the sole general partner of each of Flagship Ventures Fund IV, L.P. ("Flagship IV"), and Flagship Ventures Fund IV-Rx, L.P ("Flagship IV-Rx"). Flagship 1V"), and Flagship IV-Rx (collectively, the "Funds") are reporting persons and, concurrently herewith, are jointly filing a Form 3 reporting their ownership in certain of the Issuer's derivative and non-derivative securities (collectively, the "Fund Shares"). As a manager of Fund 2007 GP and Fund IV GP, Mr. Afeyan may be deemed to share voting and investment power with respect to the Fund Shares. Mr. Afeyan disclaims beneficial ownership of the Fund Shares, except to the extent of his pecuniary interest therein.

/s/ Noubar B. Afeyan, Ph.D. 02/05/2014

** 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.