FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| Check this box if no longer subject to | STATEMENT OF  |
|--|---------------|
| Section 16. Form 4 or Form 5           |               |
| obligations may continue. See          |               |
| Instruction 1(b).                      | Filed pursuar |

## F CHANGES IN BENEFICIAL OWNERSHIP

**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

| Name and Address of Reporting Person*     Woo Elizabeth  |  |                       |  |        | 2. Issuer Name and Ticker or Trading Symbol Flex Pharma, Inc. [ FLKS ] |  |  |        |  |                         |   |  | Relationship<br>neck all appli<br>Directo                         | cable)   | g Pers         | son(s) to Issu<br>10% Ow<br>Other (s                              | ner                                   |
|--|--|-----------------------|--|--------|--|--|--|--------|--|-------------------------|---|--|---|--|----------------|---|---------------------------------------|
|  | Last) (First) (Middle) C/O FLEX PHARMA, INC. 300 BOYLSTON STREET   |                       |  |        |  |  | 3. Date of Earliest Transaction (Month/Day/Year) 06/29/2015  |        |  |                         |   |  |   | VP, Investor Re  |                | below)  |                                       |
| (Street) BOSTON  | N M  | A                     | 02199<br>(Zip)                                       |        | 4. If  | 4. If Amendment, Date of Original Filed (Month/Day/Year) |  |        |  |                         | 6. Lin  | ndividual or Joint/Group Filing (Check Applicable  E)  X Form filed by One Reporting Person  Form filed by More than One Reporting  Person |   |  |                |   |                                       |
|  |  | Tab                   | le I - Non-  | Deriva | ative  | Sec  | curities   | s Ac   | quired, Di   | sposed o                | of, or Be   | neficial   | ly Owned  |  |                |   |                                       |
| 1. Title of Security (Instr. 3)  2. Transa Date (Month/D |  |                       | Execution Date,                                      |        | Code (Instr. 5)  |  |  |        | Benefici   | es<br>ally<br>Following | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)                             | : Direct<br>r Indirect<br>str. 4)  | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |                |   |                                       |
|  |  |                       |  |        |  |  | Code V   | Amount | (A) or<br>(D)  | Price                   | Transac<br>(Instr. 3  | tion(s)  |   |  | ,54. 4,        |   |                                       |
|  | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |                       |  |        |  |  |  |        |  |                         |   |  |   |  |                |   |                                       |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)      | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security  | cise (Month/Day/Year) | 3A. Deemed<br>Execution Day<br>if any<br>(Month/Day/ | Co     | ansaction<br>ode (Instr.   |  | 5. Number<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D) (Instr.<br>3, 4 and 5) |        | 6. Date Exercisable and<br>Expiration Date<br>(Month/Day/Year) |                         | 7. Title and Amount<br>of Securities<br>Underlying<br>Derivative Security<br>(Instr. 3 and 4) |  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)               | 9. Numbe<br>derivative<br>Securities<br>Beneficial<br>Owned<br>Following<br>Reported<br>Transactic<br>(Instr. 4) | e<br>s<br>Illy | Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>(Instr. 4) |
|  |  |                       |  | Code   |  | v  | (A)  | (D)    | Date<br>Exercisable  | Expiration<br>Date      | Title   | Amount<br>or<br>Number<br>of<br>Shares   |   |  |                |   |                                       |
| Stock<br>Option<br>(right to<br>buy)                     | \$17.43  | 06/29/2015            |  | 1      | A  |  | 15,000   |        | (1)  | 06/29/2025              | Common<br>Stock   | 15,000   | \$0   | 15,000   | 0              | D   |                                       |

## **Explanation of Responses:**

1. 25% of the total shares underlying this option vest on April 15, 2015, the remaining shares vest 1/48 per month over the next 36 months thereafter, subject to continued service to the Issuer through each vesting date.

## Remarks:

/s/ Robert Hadfield, Attorneyin-Fact

07/01/2015

\*\* 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 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).

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.