FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Washington, D.C. 20049

STATEMENT	OF CHANGES	S IN BENEFI	CIAL OWNE	RSHIP

	OMB APPRO	VAL
	OMB Number:	3235-0287
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l	hours per response:	0.5

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

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* Westphal Christoph H						2. Issuer Name and Ticker or Trading Symbol Flex Pharma, Inc. [FLKS]								Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director X 10% Owner					
(Last) (First) (Middle) C/O FLEX PHARMA, INC. 800 BOYLSTON STREET					3. Date of Earliest Transaction (Month/Day/Year) 09/28/2015								X Officer (give title Other (specify below) President and CEO						
(Street) BOSTON MA 02199 (City) (State) (Zip)					- 4. li	4. If Amendment, Date of Original Filed (Month/Day/Year)								Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person					
		Tabl	e I - N	lon-Deriv	/ative	Sec	uritie	s Ac	quire	d, Di	sposed o	f, or B	enefici	ially	Owne	ed			
1. Title of Security (Instr. 3) 2. Transaction Date (Month/Day/Y				Execution Date,				4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 an			nd 5) Securities Beneficially Owned Followi		es ially Following	6. Ownership Form: Direct (D) or Indirect g (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership			
							Code	v	Amount	(A) or (D)	Price	Repor Transa (Instr.		ction(s) 3 and 4)			(Instr. 4)		
Common Stock 09/28/201					015	.5		P (1)	П	924	A	\$11.18	349 3,91		14,735		D		
Common Stock															2,69	97,264		I	By Longwood Fund II. L.P. ⁽²⁾
	Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																		
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	if any	emed tion Date, n/Day/Year)	4. Transa Code 8)		on of E			6. Date Exercisable and Expiration Date (Month/Day/Year)			and t of ies /ing ive y (Instr. 3	De Se	Price of rivative curity str. 5)	9. Number derivative Securities Beneficiall Owned Following Reported Transactio (Instr. 4)	ve es ially ng d tion(s)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code	e V (A) (D)		Date Exercisable		Expiration Date	Title	or Number of Shares							

Explanation of Responses:

2. Longwood Fund II GP, LLC is the ultimate General Partner of Longwood Fund II, L.P. Christoph Westphal, M.D., Ph.D., Richard Aldrich and Michelle Dipp, M.D., Ph.D. (collectively, the "Managers") are managers of Longwood Fund II GP, LLC, and, as such, may be deemed to have shared voting and dispositive power with respect to the issuer's securities held by Longwood Fund II, L.P. (the "Longwood Shares"). Each of the Managers disclaims beneficial ownership of the Longwood Shares, except to the extent of their respective pecuniary interest therein, and the inclusion of these shares in this report shall not be deemed an admission of beneficial ownership of the shares for purposes of Section 16 or for any other purpose.

Remarks:

/s/ Robert Hadfield, Attorneyin-Fact 09/30/2015

** 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.

 $^{1. \} The purchase \ reported in this Form \ 4 \ was \ effected \ pursuant \ to \ a \ Rule \ 10b5-1 \ trading \ plan \ adopted \ on \ February \ 17, \ 2015.$