Flex Pharma, Inc. Form SC 13G February 12, 2019

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

FLEX PHA	ARMA, INC.					
(Name of Issue	 £)					
common stock						
(Title of Class of Securities)						
33938A10	05					
(CUSIP Number) December	c 4, 2018					
(Date of Event Which Requires Fi	iling of this Statement)					
Check the appropriate box to designate the rule Schedule is filed:	pursuant to which this					
[X] Rule 13d-1(b)						
[_] Rule 13d-1(c)						
[_] Rule 13d-1(d)						
*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.						
The information required in the remainder of the deemed to be "filed" for the purpose of Section Act of 1934 ("Act") or otherwise subject to the of the Act but shall be subject to all other prosee the Notes).	18 of the Securities Exchange liabilities of that section					
CUSIP NO. 33938A105 13G	Page 2 of 8 Pages					
(1) NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSON	DNS (entities only).					
Renaissance Technologies LLC 26-03857	758					
(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A (a) [_]	GROUP (SEE INSTRUCTIONS):					

	(b) [_]				
(3)	SEC USE ONLY				
(4)	CITIZENSHIP OR PLACE OF ORG	ANIZATION			
	Delaware				
			(5)	SOLE VOTING POWER	
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:		1,027,971		
		(6)	SHARED VOTING POWER		
				0	
			(7)	SOLE DISPOSITIVE POWER	
				1,027,971	
			(8)	SHARED DISPOSITIVE POWER	
				0	
(9)	AGGREGATE AMOUNT BENEFICIA	LLY OWNED BY EAC	H REI	PORTING PERSON	
	1	,027,971			
(10)	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES				
	(SEE INSTRUCTIONS)				
 (11)	PERCENT OF CLASS REPRESEN	TED BY AMOUNT IN	ROW	(9)	
	5	.69 %			
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)		
		Page 2 of 8 page	es		
	 IP NO. 33938A105	13G		 Page 3 of 8 Page	
	NAMES OF REPORTING PERSONS		 NS (1		
	RENAISSANCE TECHNOLOGIES HOLDINGS CORPORATION 13-3127734				
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) [_] (b) [_]				
(3)	SEC USE ONLY				

(4) CITIZENSHIP OR				
Delaware				
		((5)	SOLE VOTING POWER
NUMBER OF SHAR BENEFICIALLY O	WNED	_		1,027,971
BY EACH REPORT PERSON WITH:	ING	((6)	SHARED VOTING POWER
		_		0
		((7)	SOLE DISPOSITIVE POWER
				1,027,971
		((8)	SHARED DISPOSITIVE POWER
				0
		_		
(9) AGGREGATE AMOU	NT BENEFICIALLY	OWNED BY EACH	REF	PORTING PERSON
	1,027	, 971		
(10) CHECK BOX IF T (SEE INSTRUCT		UNT IN ROW (9)) ΕΣ	KCLUDES CERTAIN SHARES
(11) PERCENT OF CL	ASS REPRESENTED	BY AMOUNT IN R	ROW	(9)
	5.69	%		
(12) TYPE OF REPORT	ING PERSON (SEE	INSTRUCTIONS)		
	Pag	e 3 of 8 pages		
CUSIP NO. 33938A1	05	 13G		 Page 4 of 8 Page
 Item 1.				
(a) Name of Iss	uer			
FLEX PHARMA	, INC.			
	Issuer's Princip	al Executive C	Offi	ces.
	on Street, 24th			
Item 2.		,,		
(a) Name of Per	son Filing:			
		£11.11. P		Tankerlan's TTC
				sance Technologies LLC ngs Corporation ("RTHC").

(b) Address of Principal Business Office or, if none, Residence.

The principal business address of the reporting persons is:

800 Third Avenue New York, New York 10022

(c) Citizenship.

RTC is a Delaware limited liability company, and RTHC is a Delaware corporation.

(d) Title of Class of Securities.

common stock

(e) CUSIP Number.

33938A105

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- Item 3. If this statement is filed pursuant to Rule 13d-1(b) or 13-d-2(b) or (c), check whether the person filing is a:
- (a) [_] Broker or dealer registered under section 15 of the Act.
- (b) [_] Bank as defined in section 3(a)(6) of the Act.
- (c) [_] Insurance Company as defined in section 3(a)(19) of the Act.
- (d) [_] Investment Company registered under section 8 of the Investment Company Act.
- (e) [x] Investment Adviser in accordance with Sec.240.13d-1(b)(1)(ii)(E).
- (f) [_] Employee Benefit Plan or Endowment Fund in accordance with Sec. 240.13d-1 (b) (1) (ii) (F).
- (g) [_] Parent holding company, in accordance with Sec.240.13d-1 (b) (1) (ii) (G).
- (h) $[_]$ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (i) [_] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940.
- (j) [_] Group, in accordance with Sec.240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

(a) Amount beneficially owned.

RTC: 1,027,971 shares

RTHC: 1,027,971 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

(b) Percent of Class.

RTC: 5.69 % RTHC: 5.69 %

- (c) Number of shares as to which the person has:
 - (i) sole power to vote or to direct the vote:

RTC: 1,027,971 RTHC: 1,027,971

(ii) Shared power to vote or to direct the vote: 0

(iii) sole power to dispose or to direct the disposition of:

RTC: 1,027,971 RTHC: 1,027,971

(iv) Shared power to dispose or to direct the disposition of:

RTC: 0 RTHC: 0

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Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [_]

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

Certain funds and accounts managed by RTC have the right to receive dividends and proceeds from the sale of the securities which are the subject of this report.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Not applicable

Item 8. Identification and Classification of Members of the Group.

Not applicable

Item 9. Notice of Dissolution of a Group.

Not applicable

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Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 12, 2019

Renaissance Technologies LLC

By: /s/ Mark Silber
Executive Vice President

Renaissance Technologies Holdings Corporation

By: /s/ Mark Silber Vice President

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See $18\ U.S.C.\ 1001$).

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EXHIBIT 99.1

AGREEMENT REGARDING JOINT FILING

UNDER RULE 13D-1(K) OF THE EXCHANGE ACT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees to the filing on behalf of each of a Statement on Schedule 13G, and all amendments thereto, with respect to the shares of common stock of FLEX PHARMA, INC.

Date: February 12, 2019

Renaissance Technologies LLC

By: /s/ Mark Silber
Executive Vice President

Renaissance Technologies Holdings Corporation

By: /s/ Mark Silber Vice President

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