FATE THERAPEUTICS INC Form SC 13G December 01, 2016

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

#### SCHEDULE 13G (Rule 13d-102)

#### INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(b)

(Amendment No. )1

Fate Therapeutics, Inc. (Name of Issuer)

Common stock, par value \$0.001 per share (Title of Class of Securities)

31189P 10 2 (CUSIP Number)

November 21, 2016 (Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- o Rule 13d-1(b)
- x Rule 13d-1(c)
- o Rule 13d-1(d)

1 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 this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

NAME OF REPORTING PERSON	
Biotechnology Value Fund, L.P.	
CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
GROUP	(b) o
SEC USE ONLY	
CITIZENSHIP OR PLACE OF ORGANIZATION	
	Biotechnology Value Fund, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP SEC USE ONLY

De	laware	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		1,715,611
PERSON WITH	7	SOLE DISPOSITIVE POWER

0 shares

### SHARED DISPOSITIVE POWER

## 1,715,611

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,715,611

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

4.2%

12 TYPE OF REPORTING PERSON

8

PN

1	NAME OF REPORTING PERSON	
2	Biotechnology Value Fund II, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) x (b) o
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	

Del	aware	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		1,105,088
PERSON WITH	7	SOLE DISPOSITIVE POWER

8

0 shares SHARED DISPOSITIVE POWER

# 1,105,088

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,105,088

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.7%

12 TYPE OF REPORTING PERSON

PN

1	NAME OF REPORTING PER	SON	
2	Biotechnology Value Trading CHECK THE APPROPRIATE GROUP		(a) x (b) o
3	SEC USE ONLY		(-) -
4	CITIZENSHIP OR PLACE OI	FORGANIZATION	
	Cayman Islands		
NUMBER OF	5	SOLE VOTING POWER	
SHARES			
BENEFICIALLY		0 shares	
OWNED BY	6	SHARED VOTING POWER	
EACH			
REPORTING		331,022	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0 shares	

331,022

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

SHARED DISPOSITIVE POWER

331,022

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

Less than 1%

12 TYPE OF REPORTING PERSON

8

PN

1	NAME OF REPORTING PERSON	
2	BVF Partners OS Ltd. CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
	GROUP	(b) o
3	SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

8

C	Cayman Islands	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		331,022
PERSON WITH	7	SOLE DISPOSITIVE POWER

0 shares

#### SHARED DISPOSITIVE POWER

331,022

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

331,022

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

Less than 1%

12 TYPE OF REPORTING PERSON

CO

1	NAME OF REPORTING PERSON	
2	BVF Partners L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
2	GROUP	(b) o
3	SEC USE ONLY	

#### 4 CITIZENSHIP OR PLACE OF ORGANIZATION

8

	Delaware	
NUMBER OF	5	5 SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	5 SHARED VOTING POWER
EACH		
REPORTING		3,759,398
PERSON WITH	7	SOLE DISPOSITIVE POWER

0 shares

# SHARED DISPOSITIVE POWER

#### 3,759,398

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,759,398

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

9.1%

12 TYPE OF REPORTING PERSON

PN, IA

1	NAME OF REPORTING PERSON
	BVF Inc.

- 2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A (a) x GROUP (b) o
- 3 SEC USE ONLY
- 4 CITIZENSHIP OR PLACE OF ORGANIZATION

8

]	Delaware	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		3,759,398
PERSON WITH	7	SOLE DISPOSITIVE POWER

0 shares

#### SHARED DISPOSITIVE POWER

#### 3,759,398

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,759,398

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

9.1%

12 TYPE OF REPORTING PERSON

CO

1	NAME OF REPORTING PERSON	
2	Mark N. Lampert CHECK THE APPROPRIATE BOX IF A MEMBER OF A	(a) x
2	GROUP	(b) o
3	SEC USE ONLY	

4 CITIZENSHIP OR PLACE OF ORGANIZATION

8

1	United States	
NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		3,759,398
PERSON WITH	7	SOLE DISPOSITIVE POWER

0 shares

### SHARED DISPOSITIVE POWER

#### 3,759,398

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,759,398

- 10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES
- 11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

9.1%

12 TYPE OF REPORTING PERSON

IN

#### CUSIP NO. 31189P 10 2

Item 1(a).

Name of Issuer:

Fate Therapeutics, Inc., a Delaware corporation (the "Issuer").

Item 1(b).

Address of Issuer's Principal Executive Offices:

3535 General Atomics Court, Suite 200 San Diego, CA 92121

Item 2(a).Name of Person FilingItem 2(b).Address of Principal Business Office or, if None, ResidenceItem 2(c).Citizenship

Biotechnology Value Fund, L.P. ("BVF") 1 Sansome Street, 30th Floor San Francisco, California 94104 Citizenship: Delaware

Biotechnology Value Fund II, L.P. ("BVF2") 1 Sansome Street, 30th Floor San Francisco, California 94104 Citizenship: Delaware

Biotechnology Value Trading Fund OS LP ("Trading Fund OS") PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands Citizenship: Cayman Islands

BVF Partners OS Ltd. ("Partners OS") PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands Citizenship: Cayman Islands

BVF Partners L.P. ("Partners") 1 Sansome Street, 30th Floor San Francisco, California 94104 Citizenship: Delaware

BVF Inc. 1 Sansome Street, 30th Floor San Francisco, California 94104 Citizenship: Delaware

Mark N. Lampert ("Mr. Lampert") 1 Sansome Street, 30th Floor San Francisco, California 94104

Citizenship: United States

Each of the foregoing is referred to as a "Reporting Person" and collectively as the "Reporting Persons."

#### CUSIP NO. 31189P 10 2

Item 2(d).

Title of Class of Securities:

Common stock, par value \$0.001 per share (the "Common Stock")

Item 2(e).

CUSIP Number:

31189P 10 2

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

/x/ Not applicable.

(a)	//	Broker or dealer registered under Section 15 of the Exchange Act.
(b)	11	Bank as defined in Section $3(a)(6)$ of the Exchange Act.

(c) // Insurance company as defined in Section 3(a)(19) of the Exchange Ac

(c) // Insurance company as defined in Section 3(a)(19) of the Exchange Act.

(d) // Investment company registered under Section 8 of the Investment Company Act.

(e) // An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).

(f) // An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).

(g) // A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).

(h) // A savings association 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.
  - (j) // Group, in accordance with Rule 13d-1(b)(1)(ii)(J).
- (k)//Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J), please specify the type of institution: \_\_\_\_\_

Item 4.

#### Ownership

(a)

Amount beneficially owned:

As of the close of business on December 1, 2016 (i) BVF beneficially owned 1,715,611 shares of Common Stock, (ii) BVF2 beneficially owned 1,105,088 shares of Common Stock, and (iii) Trading Fund OS beneficially owned 331,022 shares of Common Stock.

Partners OS as the general partner of Trading Fund OS may be deemed to beneficially own the 331,022 shares of Common Stock beneficially owned by Trading Fund OS.

#### CUSIP NO. 31189P 10 2

Partners, as the general partner of BVF, BVF2, the investment manager of Trading Fund OS, and the sole member of Partners OS, may be deemed to beneficially own the 3,759,398 shares of Common Stock beneficially owned in the aggregate by BVF, BVF2, Trading Fund OS, and certain Partners Managed accounts (the "Partners Managed Accounts"), including 607,677 shares of Common Stock held in the Partners Managed Accounts.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 3,759,398 shares of Common Stock beneficially owned by Partners.

Mr. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the 3,759,398 shares of Common Stock beneficially owned by BVF Inc.

The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of any shares of Common Stock owned by another Reporting Person. Partners OS disclaims beneficial ownership of the shares of Common Stock beneficially owned by Trading Fund OS. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the shares of Common Stock beneficially owned by BVF, BVF2, Trading Fund OS, and the Partners Managed Accounts, and the filing of this statement shall not be construed as an admission that any such person or entity is the beneficial owner of any such securities.

(b)

Percent of class:

The following percentages are based on 41,384,991 shares of Common Stock outstanding as disclosed in Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 22, 2016.

As of the close of business on December 1, 2016 (i) BVF beneficially owned approximately 4.2% of the outstanding shares of Common Stock, (ii) BVF2 beneficially owned approximately 2.7% of the outstanding shares of Common Stock, (iii) Trading Fund OS beneficially owned less than 1% of the outstanding shares of Common Stock (iv) Partners OS may be deemed to beneficially own less than 1% of the outstanding shares of Common Stock, and (v) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 9.1% of the outstanding shares of Common Stock (approximately 1.5% of which is held in the Partners Managed Accounts).

(c)	Number of shares as to which such person has:
(i)	Sole power to vote or to direct the vote
See Cover Pages Items 5-9.	
(ii)	Shared power to vote or to direct the vote
See Cover Pages Items 5-9.	
(iii)	Sole power to dispose or to direct the disposition of
See Cover Pages Items 5-9.	

CUSIP	NO. 31189P 10 2	
	(iv)	Shared power to dispose or to direct the disposition of
See Cov	ver Pages Items 5-9.	
Item 5.		Ownership of Five Percent or Less of a Class.
Not Ap	plicable.	
Item 6.		Ownership of More than Five Percent on Behalf of Another Person.
		Mr. Lampert share voting and dispositive power over the shares of Common Stock F, BVF2, Trading Fund OS, and the Partners Managed Accounts.
	dentification and Cl Holding Company of	lassification of the Subsidiary That Acquired the Security Being Reported on by the Parent r Control Person.
Not Ap	plicable.	
Item 8.		Identification and Classification of Members of the Group.
See Ext	nibit 99.1	
Item 9.	tem 9. Notice of Dissolution of Group.	
Not Ap	plicable.	
Item 10		Certifications.
By sign	ing below each of t	he undersigned certifies that, to the best of its knowledge and belief, the securities referred

By signing below each of the undersigned certifies that, to the best of its knowledge and belief, the securities referred to above were 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 his knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

BVF INC.

MARK N. LAMPERT

Dated: December 1, 2016

#### BIOTECHNOLOGY VALUE FUND, L.P.

By:	BVF Partners L.P., its general		
	partner		
By:	BVF Inc., its general partner	By:	/s/ Mark N. Lampert
-			Mark N. Lampert
By:	/s/ Mark N. Lampert		President
-	Mark N. Lampert		
	President		
			/s/ Mark N. Lampert

## BIOTECHNOLOGY VALUE FUND II, L.P.

By: By:	BVF Partners L.P., its general partner BVF Inc., its general partner
By:	/s/ Mark N. Lampert Mark N. Lampert President

#### BVF PARTNERS L.P.

- By: BVF Inc., its general partner
- By: /s/ Mark N. Lampert Mark N. Lampert President

# BVF PARTNERS OS LTD.

By:	BVF Partners L.P., its	
	sole member	
By:	BVF Inc., its general	
	partner	

By: /s/ Mark N. Lampert

Mark N. Lampert President

# BIOTECHNOLOGY VALUE TRADING FUND OS LP

By:	BVF Partners L.P., its
	investment manager
By:	BVF Inc., its general
	partner

By: /s/ Mark N. Lampert Mark N. Lampert President