FIVE PRIME THERAPEUTICS INC Form SC 13G February 14, 2014

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

Five Prime Therapeutics, Inc. (Name of Issuer)

Common Stock, \$0.001 par value (Title of Class of Securities)

33830X 10 4 (CUSIP Number)

February 7, 2014 (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)

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).

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.

CUSIP NO. 33830X 10 4

1	NAME OF REPORTING PERSON			
2	Biotechnology Value Fund, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY			
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		6	0 shares SHARED VOTING POWER	
		7	614,456 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	614,456 EFICIALLY OWNED BY EACH	REPORTING PERSON
10		IF THE AGGREG ERTAIN SHARI	GATE AMOUNT IN ROW (9)	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	3.1% TYPE OF REPORTING PERSON			
	PN			
2				

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2	Biotechnology Value Fund II, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A (a) x			
3	GROUP (b) o SEC USE ONLY			
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH		6	0 shares SHARED VOTING POWER	
REPORTING PERSON WITH		7	347,941 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	347,941 EFICIALLY OWNED BY EACH	REPORTING PERSON
10	347,941 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	1.8% TYPE OF REPORTING PERSON			
	PN			

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1	NAME OF REPORTING PERSON			
2	Investment 10, L.L.C. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY			
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF SHARES	Illinois	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH		6	0 shares SHARED VOTING POWER	
REPORTING PERSON WITH		7	173,603 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE	AMOUNT BEN	173,603 EFICIALLY OWNED BY EACH	REPORTING PERSON
10	173,603 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	Less than 1% TYPE OF REPORTING PERSON			
	00			
4				

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2 3 4	BVF Partners L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (b) o SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION			
4	CHIZENSHIP	OR PLACE OF	ORGANIZATION	
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY	•	6	0 shares SHARED VOTING POWER	
EACH REPORTING PERSON WITH		7	1,136,000 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	CR
9	AGGREGATE	AMOUNT BEN	1,136,000 EFICIALLY OWNED BY EACH	REPORTING PERSON
10		IF THE AGGREG ERTAIN SHARE	JATE AMOUNT IN KOW (3)	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	5.7% TYPE OF REP	ORTING PERSC)N	
	PN, IA			
5				

CUSIP NO. 33830X 10 4

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2 3 4	BVF Inc. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION			
NUMBER OF	Delaware	5	SOLE VOTING POWER	
SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		6	0 shares SHARED VOTING POWER	
		7	1,136,000 SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	ER
9	AGGREGATE	AMOUNT BEN	1,136,000 EFICIALLY OWNED BY EACH	I REPORTING PERSON
10	1,136,000 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	5.7% TYPE OF REP	ORTING PERSO)N	
	СО			
6				

CUSIP NO. 33830X 10 4

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2 3	Mark N. Lampert CHECK THE APPROPRIAT GROUP SEC USE ONLY	(a) x (b) o	
4	CITIZENSHIP OR PLACE OF ORGANIZATION		
NUMBER OF SHARES	United States 5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH	6	0 shares SHARED VOTING POWER	
REPORTING PERSON WITH	7	1,136,000 SOLE DISPOSITIVE POWER	
	8	0 shares SHARED DISPOSITIVE POWE	ER
9	AGGREGATE AMOUNT B	1,136,000 ENEFICIALLY OWNED BY EACH	I REPORTING PERSON
10	1,136,000 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES		
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		
12	5.7% TYPE OF REPORTING PERSON		
	IN		
7			

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Item 1(a). Name of Issuer:

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

Item 1(b). Address of Issuer's Principal Executive Offices:

Two Corporate Drive

South San Francisco, California 94080

Item 2(a). Name of Person Filing

Item 2(b). Address of Principal Business Office or, if None, Residence

Item 2(c). Citizenship

Biotechnology Value Fund, L.P. ("BVF") 900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611 Citizenship: Delaware

Biotechnology Value Fund II, L.P. ("BVF2") 900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611 Citizenship: Delaware

Investment 10, L.L.C. ("ILL10") 900 North Michigan Avenue, Suite 1100 Chicago, Illinois 60611

Citizenship: Illinois

BVF Partners L.P. ("Partners") 900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611 Citizenship: Delaware

BVF Inc.

900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611 Citizenship: Delaware

Mark N. Lampert ("Mr. Lampert")

900 North Michigan Avenue, Suite 1100

Chicago, Illinois 60611 Citizenship: United States

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

Item 2(d). Title of Class of Securities:

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

Item 2(e).			CUSIP Number:
33830X 10	0 4		
Item 3. If	This Staten	nent is Filed Pursu	uant 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)	//	Bank as defined in Section 3(a)(6) of the Exchange Act.
	(c)	// Ins	urance company as defined in Section 3(a)(19) of the Exchange Act.
(d) //	Investmen	t 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 ben	nefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
(g)	//	A parent holding	g company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
(h)	//	A savings asso	ociation as defined in Section 3(b) of the Federal Deposit Insurance Act.
	_	that is excluded fr mpany Act.	om the definition of an investment company under Section 3(c)(14) of the
	(j)	//	Group, in accordance with Rule 13d-1(b)(1)(ii)(J).
	•		240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with se specify the type of institution:
Item 4.			Ownership
		(a)	Amount beneficially owned:
	eficially o		hereof, (i) BVF beneficially owned 614,456 shares of Common Stock, (ii) res of Common Stock, and (iii) ILL10 beneficially owned 173,603 shares of

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 1,136,000 shares of Common Stock beneficially owned by Partners.

own 1,136,000 shares of Common Stock beneficially owned in the aggregate by BVF, BVF2 and ILL10.

Partners, as the general partner of BVF and BVF2 and the investment adviser of ILL10 may be deemed to beneficially

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Mr. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the 1,136,000 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. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the shares of Common Stock beneficially owned by BVF, BVF2 and ILL10 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 19,818,008 shares of Common Stock outstanding as of February 10, 2014, as disclosed in the Issuer's Prospectus filed pursuant to Rule 424(b)(4) with the Securities and Exchange Commission on February 7, 2014.

As of the close of business on the date hereof, (i) BVF beneficially owned approximately 3.1% of the outstanding shares of Common Stock, (ii) BVF2 beneficially owned approximately 1.8% of the outstanding shares of Common Stock, (iii) ILL10 beneficially owned less than 1% of the outstanding shares of Common Stock, and (iv) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 5.7% of the outstanding shares of Common Stock.

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

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

See Cover Pages Items 5-9.

See Cover Pages Items 5-9.

(iii) Sole power to dispose or to direct the disposition of

See Cover Pages Items 5-9.

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

See Cover Pages Items 5-9.

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

Not Applicable.

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

Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the shares of Common Stock beneficially owned by BVF, BVF2 and ILL10.

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Item Identification and Classification of the Subsidiary That Acquired the Security Being Reported on by the ParentHolding Company or Control Person.

Not Applicable.

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

See Exhibit 99.1.

Item 9. Notice of Dissolution of Group.

Not Applicable.

Item 10. Certifications.

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.

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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.

Dated: February 14, 2014

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

President

BIOTECHNOLOGY VALUE FUND II, L.P.

By: BVF Partners L.P., its general By:

partner

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert

Mark N. Lampert

President

BVF INC.

By:

BVF PARTNERS L.P.

INVESTMENT 10, L.L.C. By: /s/ Mark N. Lampert

Mark N. Lampert

President

BVF Inc., its general partner

/s/ Mark N. Lampert

Mark N. Lampert

BVF Partners L.P., its investment President

manager

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert

Mark N. Lampert

President

/s/ Mark N. Lampert MARK N. LAMPERT

By: