INFINITY PHARMACEUTICALS, INC. Form SC 13G/A

February 14, 2013

#### 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. 4)1

Infinity Pharmaceuticals, Inc. (Name of Issuer)

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

45665G303 (CUSIP Number)

December 31, 2012 (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).

<sup>1</sup> 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. 45665G303

2

1	NAME OF REPORTING PERSON			
2	Biotechnology V CHECK THE AF GROUP SEC USE ONLY	PPROPRIATE B	BOX IF A MEMBER OF A	(a) x (b) o
4	CITIZENSHIP C	OR PLACE OF C	ORGANIZATION	
NUMBER OF SHARES	Delaware 5	i	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH	6		0 shares SHARED VOTING POWER	
REPORTING PERSON WITH	7		0 shares SOLE DISPOSITIVE POWER	
	8		0 shares SHARED DISPOSITIVE POWE	R
9	AGGREGATE A		0 shares EFICIALLY OWNED BY EACH	REPORTING PERSON
10	0 shares CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) " EXCLUDES CERTAIN SHARES			
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	0% TYPE OF REPO	RTING PERSO	N	
	PN			
2				

NAME OF REPORTING PERSON

## CUSIP NO. 45665G303

2 3			(a) x (b) o	
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	0 shares SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	C.R.
9	AGGREGATE	AMOUNT BEN	0 shares EFICIALLY OWNED BY EACH	REPORTING PERSON
10		IF THE AGGREG ERTAIN SHARE	GATE AMOUNT IN ROW (9)	
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
12	0% TYPE OF REP	ORTING PERSC	DN	
	PN			
3				

### CUSIP NO. 45665G303

1	NAME OF REP	PORTING PERSO	ON	
2	BVF Investments, L.L.C. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o			
3	SEC USE ONL	Y		
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Delaware			
NUMBER OF SHARES		5	SOLE VOTING POWER	
BENEFICIALLY			0 shares	
OWNED BY		6	SHARED VOTING POWER	
EACH				
REPORTING			0 shares	
PERSON WITH		7	SOLE DISPOSITIVE POWER	
			0 shares	_
		8	SHARED DISPOSITIVE POWE	R
			0 shares	
9	AGGREGATE	AMOUNT BEN	EFICIALLY OWNED BY EACH	REPORTING PERSON
	0 shares			
10			GATE AMOUNT IN ROW (9)	•
	EXCLUDES CERTAIN SHARES			
11	DED CENT OF	CLACC DEDDEC	VENITED DV AMOUNT IN DOW	(0)
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
	0%			
12		ORTING PERSO	N	
	OO			
1				

### CUSIP NO. 45665G303

1	NAME OF RE	PORTING PERS	ON	
2	Investment 10, L.L.C. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x (b) o			
3	SEC USE ONL	LY		
4	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Illinois			
NUMBER OF SHARES	immois	5	SOLE VOTING POWER	
BENEFICIALLY	•		0 shares	
OWNED BY		6	SHARED VOTING POWER	
EACH				
REPORTING			0 shares	
PERSON WITH		7	SOLE DISPOSITIVE POWER	
			0 shares	
		8	SHARED DISPOSITIVE POWE	R
		O	SIT INCED DIST COTTIVE TO WE	IX.
			0 shares	
9	AGGREGATE	AMOUNT BEN	EFICIALLY OWNED BY EACH	REPORTING PERSON
	0 shares			
10		IF THE AGGRE	GATE AMOUNT IN ROW (9)	
		ERTAIN SHARI	· ·	
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
	0%			
12		ORTING PERSO	DN	
	OO			
5				
J				

NAME OF REPORTING PERSON

### CUSIP NO. 45665G303

1

2 3 4	BVF Partners L.P. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION			(a) x (b) o
NUMBER OF SHARES	Delaware	5	SOLE VOTING POWER	
BENEFICIALLY OWNED BY EACH	7	6	0 shares SHARED VOTING POWER	
REPORTING PERSON WITH		7	0 shares SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	ER .
9	AGGREGATE	AMOUNT BEN	0 shares EFICIALLY OWNED BY EACH	REPORTING PERSON
10		IF THE AGGREGERIAL	GATE AMOUNT IN ROW (9) ES	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)			
12	0% TYPE OF REP	ORTING PERSO	ON	
	PN, IA			

NAME OF REPORTING PERSON

### CUSIP NO. 45665G303

2 3 4	GROUP SEC USE ONL	.Y	BOX IF A MEMBER OF A ORGANIZATION	(a) x (b) o
NUMBER OF	Delaware	5	SOLE VOTING POWER	
SHARES BENEFICIALLY OWNED BY	7	6	0 shares SHARED VOTING POWER	
EACH REPORTING PERSON WITH		7	0 shares SOLE DISPOSITIVE POWER	
		8	0 shares SHARED DISPOSITIVE POWE	ER
9	AGGREGATE	AMOUNT BEN	0 shares EFICIALLY OWNED BY EACH	I REPORTING PERSON
10		IF THE AGGREGERTAIN SHARI	GATE AMOUNT IN ROW (9) ES	
11	PERCENT OF	CLASS REPRES	SENTED BY AMOUNT IN ROW	<i>y</i> (9)
12	0% TYPE OF REP	ORTING PERSO	ON	
	CO			
7				

NAME OF REPORTING PERSON

### CUSIP NO. 45665G303

2	· ·		(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	0 shares SOLE DISPOSITIVE POWER	
	8	0 shares SHARED DISPOSITIVE POWE	ER
9	AGGREGATE AMOUNT BEN	0 shares EFICIALLY OWNED BY EACH	REPORTING PERSON
10	0 shares CHECK BOX IF THE AGGREGEXCLUDES CERTAIN SHARI	. ,	
11	PERCENT OF CLASS REPRES	SENTED BY AMOUNT IN ROW	(9)
12	0% TYPE OF REPORTING PERSO	ON	
	IN		
8			

CUSIP NO. 45665G303

Item 1(a). Name of Issuer:

Infinity Pharmaceuticals, Inc., a Delaware corporation (the "Issuer").

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

780 Memorial Drive Cambridge, MA 02139

Citizenship: Delaware

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

Biotechnology Value Fund II, L.P. ("BVF2") 900 North Michigan Avenue, Suite 1100 Chicago, Illinois 60611 Citizenship: Delaware

BVF Investments, L.L.C. ("BVLLC") 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."

CUSIP NO	O. 45665G	303	
Item 2(d).			Title of Class of Securities:
Common S	Stock, par	value \$0.001 per sh	nare (the "Common Stock")
Item 2(e).			CUSIP Number:
45665G30	)3		
Item 3. If	Γhis Stater	ment is Filed Pursua	ant 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)	// Insu	rance 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 bene	fit 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 assoc	iation as defined in Section 3(b) of the Federal Deposit Insurance Act.
	_	that is excluded fro mpany Act.	m 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).
			40.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with e specify the type of institution:
Item 4.			Ownership
		(a)	Amount beneficially owned:
As of the o	date hereo	f, the Reporting Per	sons no longer beneficially own any securities of the Issuer.
		(b)	Percent of class:
Not Applie	cable.		

CUSIP NO. 45665G303	
(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	•
(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.
_	led to report the fact that as of the date hereof the reporting person has ceased to be the nan five percent of the class of securities, check the following [X].
Item 6.	Ownership of More than Five Percent on Behalf of Another Person.
capital of Samana Capital, of the Issuer and to vote, ex	greement of BVLLC, Partners is authorized, among other things, to invest the contributed L.P., the majority member of BVLLC, in the Shares of Common Stock and other securities exercise or convert and dispose of each security, and is entitled to receive fees based on and, subject to certain exceptions, allocations based on realized and unrealized gains on
Item Identification and Cl 7. Holding Company o	lassification of the Subsidiary That Acquired the Security Being Reported on by the Parent r Control Person.
Not Applicable.	
Item 8.	Identification and Classification of Members of the Group.
See Exhibit 99.1 to Amend February 9, 2010.	ment No. 2 to the Schedule 13G filed with the Securities and Exchange Commission on
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.

#### CUSIP NO. 45665G303

#### **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, 2013

BIOTECHNOLOGY VALUE FUND, L.P.

INVESTMENT 10, L.L.C.

**BVF PARTNERS L.P.** 

BVF Partners L.P., its general By:

partner

BVF Partners L.P., its investment By:

manager

BVF Inc., its general partner By:

By:

BVF Inc., its general partner

/s/ Mark N. Lampert By:

Mark N. Lampert

President

/s/ Mark N. Lampert By:

Mark N. Lampert

President

BIOTECHNOLOGY VALUE FUND II, L.P.

BVF Partners L.P., its general

By:

BVF Inc., its general partner

partner

BVF Inc., its general partner By:

By:

/s/ Mark N. Lampert Mark N. Lampert

President

By: /s/ Mark N. Lampert

Mark N. Lampert

President

BVF INC.

BVF INVESTMENTS, L.L.C.

By:

/s/ Mark N. Lampert Mark N. Lampert

BVF Partners L.P., its manager By:

President

By: BVF Inc., its general partner

By:

By:

/s/ Mark N. Lampert

/s/ Mark N. Lampert Mark N. Lampert MARK N. LAMPERT

President