

INFINITY PHARMACEUTICALS, INC.
Form SC 13G/A
February 09, 2010

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. 2)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, 2009
(Date of Event Which Requires Filing of this Statement)

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

- Rule 13d-1(b)
- Rule 13d-1(c)
- 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).

CUSIP NO. 45665G303

1 NAME OF REPORTING PERSON

Biotechnology Value Fund, L.P.

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

Delaware

NUMBER OF 5 SOLE VOTING POWER
SHARES

BENEFICIALLY OWNED BY 6 0 shares

EACH REPORTING PERSON WITH 7 587,908

SOLE DISPOSITIVE POWER

8 0 shares
SHARED DISPOSITIVE POWER

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

587,908

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

2.2%

12 TYPE OF REPORTING PERSON

PN

CUSIP NO. 45665G303

1 NAME OF REPORTING PERSON

Biotechnology Value Fund II, L.P.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER
		0 shares
	6	SHARED VOTING POWER
		407,000
	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER
		407,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

407,000

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

1.6%

12 TYPE OF REPORTING PERSON

PN

CUSIP NO. 45665G303

1 NAME OF REPORTING PERSON

BVF Investments, L.L.C.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER
		0 shares
	6	SHARED VOTING POWER
		1,410,000
	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

1,410,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,410,000

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

5.4%

12 TYPE OF REPORTING PERSON

OO

CUSIP NO. 45665G303

1 NAME OF REPORTING PERSON

Investment 10, L.L.C.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) (b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Illinois

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER
		0 shares
	6	SHARED VOTING POWER
		168,000
	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER
		168,000

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

168,000

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

OO

CUSIP NO. 45665G303

1 NAME OF REPORTING PERSON

BVF Partners L.P.

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

Delaware

NUMBER OF	5	SOLE VOTING POWER
SHARES		
BENEFICIALLY		0 shares
OWNED BY	6	SHARED VOTING POWER
EACH		
REPORTING		2,572,908
PERSON WITH	7	SOLE DISPOSITIVE POWER
	8	0 shares
		SHARED DISPOSITIVE POWER

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,572,908

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

9.8%

12 TYPE OF REPORTING PERSON

PN, IA

CUSIP NO. 45665G303

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

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER
		0 shares
	6	SHARED VOTING POWER
		2,572,908
	7	SOLE DISPOSITIVE POWER
		0 shares
	8	SHARED DISPOSITIVE POWER

2,572,908

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,572,908

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) ..
EXCLUDES CERTAIN SHARES

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

9.8%

12 TYPE OF REPORTING PERSON

CO

CUSIP NO. 45665G303

1 NAME OF REPORTING PERSON

Mark N. Lampert

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) x

(b) o

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States