

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)<sup>1</sup>

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Cytokinetics, Incorporated  
(Name of Issuer)

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

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23282W 10 0  
(CUSIP Number)

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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:

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

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<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.

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*).

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1	NAME OF REPORTING PERSON Biotechnology Value Fund, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
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 8,151,158 (1)
	7	SOLE DISPOSITIVE POWER 0 shares
	8	SHARED DISPOSITIVE POWER 8,151,158 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 8,151,158 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.6%	
12	TYPE OF REPORTING PERSON PN	

(1) Includes 2,880,468 shares of Common Stock currently issuable upon the exercise a certain warrant. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

1	NAME OF REPORTING PERSON Biotechnology Value Fund II, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
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 4,616,516 (1)
	7	SOLE DISPOSITIVE POWER 0 shares
	8	SHARED DISPOSITIVE POWER 4,616,516 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,616,516 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.2%	
12	TYPE OF REPORTING PERSON PN	

(1) Includes 1,584,246 shares of Common Stock currently issuable upon the exercise of a certain warrant. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

1	NAME OF REPORTING PERSON Investment 10, L.L.C.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
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 3,072,072 (1)
	7	SOLE DISPOSITIVE POWER 0 shares
	8	SHARED DISPOSITIVE POWER 3,072,072 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,072,072 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 2.1%	
12	TYPE OF REPORTING PERSON OO	

(1) Includes 1,061,597 shares of Common Stock currently issuable upon the exercise of a certain warrant. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

1	NAME OF REPORTING PERSON BVF Partners L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
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 15,839,746 (1)
	7	SOLE DISPOSITIVE POWER 0 shares
	8	SHARED DISPOSITIVE POWER 15,839,746 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 15,839,746 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.98% (2)	
12	TYPE OF REPORTING PERSON PN, IA	

(1) Includes 5,526,311 shares of Common Stock currently issuable upon the exercise of certain warrants. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

(2) See Item 4.

1	NAME OF REPORTING PERSON BVF Inc.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
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 15,839,746 (1)
	7	SOLE DISPOSITIVE POWER 0 shares
	8	SHARED DISPOSITIVE POWER 15,839,746 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 15,839,746 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.98% (2)	
12	TYPE OF REPORTING PERSON CO	

(1) Includes 5,526,311 shares of Common Stock currently issuable upon the exercise of certain warrants. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

(2) See Item 4.

1	NAME OF REPORTING PERSON Mark N. Lampert	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input checked="" type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0 shares
	6	SHARED VOTING POWER 15,839,746 (1)
	7	SOLE DISPOSITIVE POWER 0 shares
	8	SHARED DISPOSITIVE POWER 15,839,746 (1)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 15,839,746 (1)	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.98% (2)	
12	TYPE OF REPORTING PERSON IN	

(1) Includes 5,526,311 shares of Common Stock currently issuable upon the exercise of certain warrants. See Item 4(a) for a full description of the Reporting Person's beneficial ownership.

(2) See Item 4.

Item 1(a). Name of Issuer:  
Cytokinetics, Incorporated, a Delaware corporation (the "Issuer").

Item 1(b). Address of Issuer's Principal Executive Offices:  
280 East Grand Avenue  
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:

23282W 10 0

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 Act (15 U.S.C. 78o).
- (b)  / / Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c)  / / Insurance company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d)  / / Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e)  / / Investment adviser in accordance with Section 240.13d-1(b)(1)(ii)(E).
- (f)  / / Employee benefit plan or endowment fund in accordance with Section 240.13d-1(b)(1)(ii)(F).
- (g)  / / Parent holding company or control person in accordance with Section 240.13d-1(b)(1)(ii)(G).
- (h)  / / Savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
- (i)  / / Church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act (15 U.S.C. 80a-3).
- (j)  / / Non-U.S. institution in accordance with Section 240.13d-1(b)(1)(ii)(J).
- (k)  / / Group, in accordance with Section 240.13d-1(b)(1)(ii)(J).

Item 4. Ownership

(a) Amount beneficially owned:

On June 25, 2012, the Reporting Persons acquired warrants exercisable for an aggregate of 5,526,311 shares of Common Stock. Such warrants are immediately exercisable for \$0.88 per share, subject to adjustment pursuant to the terms of the warrants, and expire on June 25, 2017. The warrants may not be exercised if, after such exercise, the Reporting Persons would beneficially own, as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, more than 9.98% of the number of shares of Common Stock then issued and outstanding.

As of the close of business on December 31, 2012, (i) BVF beneficially owned 8,151,158 shares of Common Stock, including 2,880,468 shares of Common Stock issuable upon the exercise of a certain warrant held by it, (ii) BVF2 beneficially owned 4,616,516 shares of Common Stock, including 1,584,246 shares of Common Stock issuable upon the exercise of a certain warrant held by it, and (iii) ILL10 beneficially owned 3,072,072 shares of Common Stock, including 1,061,597 shares of Common Stock issuable upon the exercise of a certain warrant held by it.

Partners, as the general partner of BVF and BVF2 and the investment adviser of ILL10, may be deemed to beneficially own 15,839,746 shares of Common Stock, including 5,526,311 shares of Common Stock currently issuable upon the exercise of certain warrants, beneficially owned in the aggregate by BVF, BVF2 and ILL10.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 15,839,746 shares of Common Stock, including 5,526,311 shares of Common Stock currently issuable upon the exercise of certain warrants, beneficially owned by Partners.

Mr. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the 15,839,746 shares of Common Stock, including 5,526,311 shares of Common Stock currently issuable upon the exercise of certain warrants, 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 142,413,069 shares of Common Stock outstanding as of October 25, 2012, as disclosed in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission ("SEC") on November 7, 2012.

As of the close of business on December 31, 2012, (i) BVF beneficially owned approximately 5.6% of the outstanding shares of Common Stock, (ii) BVF2 beneficially owned approximately 3.2% of the outstanding shares of Common Stock, (iv) ILL10 beneficially owned approximately 2.1% of the outstanding shares of Common Stock and (v) each of Partners, BVF Inc. and Mr. Lampert may be deemed to beneficially own approximately 9.98% 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

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.

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.

Item 7. Identification and Classification of the Subsidiary That Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not Applicable.

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

See Exhibit 99.1 to the initial Schedule 13G filed with the SEC on July 3, 2012.

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.

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.

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

By: BVF Inc., its general partner

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

INVESTMENT 10, L.L.C.

By: BVF Partners L.P., its investment manager

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 partner

By: 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 INC.

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

/s/ Mark N. Lampert  
MARK N. LAMPERT

