

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

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**SCHEDULE 13G**

**Under the Securities Exchange Act of 1934  
(Amendment No. 2)\***

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**Cytokinetics, Incorporated**

(Name of issuer)

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**Common Stock, \$0.001 par value per share**  
(Title of class of securities)

**23282W100**  
(CUSIP Number)

**December 31, 2009**  
(Date of event which requires filing of this statement)

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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)

\* 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. 23282W100	
1.	Names of reporting persons. I.R.S. Identification Nos. of above persons (entities only).  QVT Financial LP 11-3694008
2.	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input checked="" 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
	6. Shared voting power  4,239,337
	7. Sole dispositive power  0
	8. Shared dispositive power  4,239,337
9.	Aggregate amount beneficially owned by each reporting person  4,239,337
10.	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) <input type="checkbox"/>
11.	Percent of class represented by amount in Row (9)  6.75%
12.	Type of reporting person (see instructions)  PN

CUSIP No. 23282W100	
1.	Names of reporting persons. I.R.S. Identification Nos. of above persons (entities only).  QVT Financial GP LLC 11-3694007
2.	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input checked="" 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
	6. Shared voting power  4,239,337
	7. Sole dispositive power  0
	8. Shared dispositive power  4,239,337
9.	Aggregate amount beneficially owned by each reporting person  4,239,337
10.	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) <input type="checkbox"/>
11.	Percent of class represented by amount in Row (9)  6.75%
12.	Type of reporting person (see instructions)  OO

CUSIP No. 23282W100	
1.	Names of reporting persons. I.R.S. Identification Nos. of above persons (entities only).  QVT Fund LP 98-0415217
2.	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>
3.	SEC use only
4.	Citizenship or place of organization  Cayman Islands
Number of shares beneficially owned by each reporting person with:	5. Sole voting power  0
	6. Shared voting power  3,825,248
	7. Sole dispositive power  0
	8. Shared dispositive power  3,825,248
9.	Aggregate amount beneficially owned by each reporting person  3,825,248
10.	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) <input type="checkbox"/>
11.	Percent of class represented by amount in Row (9)  6.11%
12.	Type of reporting person (see instructions)  PN

CUSIP No. 23282W100	
1.	Names of reporting persons. I.R.S. Identification Nos. of above persons (entities only).  QVT Associates GP LLC 01-0798253
2.	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input checked="" 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
	6. Shared voting power  4,239,337
	7. Shared dispositive power  0
	8. Shared dispositive power  4,239,337
9.	Aggregate amount beneficially owned by each reporting person  4,239,337
10.	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) <input type="checkbox"/>
11.	Percent of class represented by amount in Row (9)  6.75%
12.	Type of reporting person (see instructions)  OO

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- Item 1 (a).** Name of Issuer  
Cytokinetics, Incorporated (the “Issuer”)
- Item 1 (b).** Address of Issuer’s Principal Executive Offices  
The address of the Issuer’s principal executive offices is:  
280 East Grand Avenue, South San Francisco, California 94080, United States
- Item 2 (a).** Name of Person Filing
- Item 2 (b).** Address of Principal Business Office or, if none, Residence
- Item 2 (c).** Citizenship  
QVT Financial LP  
1177 Avenue of the Americas, 9th Floor  
New York, New York 10036  
Delaware Limited Partnership  
  
QVT Financial GP LLC  
1177 Avenue of the Americas, 9th Floor  
New York, New York 10036  
Delaware Limited Liability Company  
  
QVT Fund LP  
Walkers SPV, Walker House  
87 Mary Street  
George Town, Grand Cayman, KY1 9001 Cayman Islands  
Cayman Islands Limited Partnership  
  
QVT Associates GP LLC  
1177 Avenue of the Americas, 9th Floor  
New York, New York 10036  
Delaware Limited Liability Company
- Item 2 (d).** Title of Class of Securities  
Common stock, \$0.001 par value per share (the “Common Stock”).
- Item 2 (e).** CUSIP Number  
The CUSIP number of the Common Stock is 23282W100.
- Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:**
- (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)  An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);
  - (f)  An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);
  - (g)  A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
  - (h)  A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
  - (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
  - (j)  A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
  - (k)  Group, in accordance with §240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution: .

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**Item 4. Ownership.**

- (a) Amount beneficially owned as of December 31, 2009:

QVT Financial LP (“QVT Financial”) is the investment manager for QVT Fund LP (the “Fund”) and Quintessence Fund L.P. (“Quintessence”). The Fund beneficially owns 2,157,206 shares of Common Stock and 1,668,042 shares of Common Stock underlying common stock purchase warrants (the “Warrants”). Accordingly, the Fund may be deemed to beneficially own 3,825,248 shares of Common Stock, consisting of the shares of Common Stock owned by the Fund and shares of Common Stock issuable upon exercise of the Warrants held by the Fund. Quintessence beneficially owns 233,681 shares of Common Stock and 180,408 Warrants, and accordingly, Quintessence may be deemed to beneficially own 414,089 shares of Common Stock, consisting of the shares of Common Stock owned by Quintessence and shares of Common Stock issuable upon exercise of the Warrants held by Quintessence.

Therefore, QVT Financial may be deemed to be the beneficial owner of an aggregate amount of 4,239,337 shares of Common Stock, consisting of the shares of Common Stock owned by the Fund and Quintessence and the shares underlying the Warrants owned by the Fund and Quintessence.

QVT Financial GP LLC, as General Partner of QVT Financial, may be deemed to beneficially own the same number of shares of Common Stock reported by QVT Financial. QVT Associates GP LLC, as General Partner of the Fund and Quintessence, may be deemed to beneficially own the aggregate number of shares of Common Stock owned by the Fund and Quintessence, and accordingly, QVT Associates GP LLC may be deemed to be the beneficial owner of an aggregate amount of 4,239,337 shares of Common Stock.

Each of QVT Financial and QVT Financial GP LLC disclaims beneficial ownership of the shares of Common Stock owned by the Fund and Quintessence. QVT Associates GP LLC disclaims beneficial ownership of all shares of Common Stock owned by the Fund and Quintessence, except to the extent of its pecuniary interest therein.

The percentage disclosed in Item 11 of the Cover Pages for each reporting person is calculated based upon the sum of (i) 60,929,626 shares of Common Stock outstanding, which is the total number of shares issued and outstanding as reported in the Issuer’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2009 and filed with the Securities and Exchange Commission on November 5, 2009 and (ii) the number of shares of Common Stock issuable upon exercise of the Warrants held by such reporting person.

- (b) Percent of class:

See Item 11 of the Cover Pages to this Schedule 13G.

- (c) Number of shares as to which the person has:

- (i) Sole power to vote or to direct the vote

0

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

See item (a) above.

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

0

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

See item (a) above.

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

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following .

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

Not Applicable

**Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company**

Not Applicable

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

Not Applicable

**Item 9. Notice of Dissolution of Group**

Not Applicable

**Item 10. Certification**

By signing below I certify that, to the best of my 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 my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 12, 2010

**QVT FINANCIAL LP**

By QVT Financial GP LLC,  
its General Partner

By: \_\_\_\_\_ /s/ OREN EISNER  
Name: **Oren Eisner**  
Title: **Authorized Signatory**

**QVT FINANCIAL GP LLC**

By: \_\_\_\_\_ /s/ OREN EISNER  
Name: **Oren Eisner**  
Title: **Authorized Signatory**

**QVT FUND LP**

By QVT Associates GP LLC,  
its General Partner

By: \_\_\_\_\_ /s/ OREN EISNER  
Name: **Oren Eisner**  
Title: **Authorized Signatory**

**QVT ASSOCIATES GP LLC**

By: \_\_\_\_\_ /s/ OREN EISNER  
Name: **Oren Eisner**  
Title: **Authorized Signatory**