

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 13G
Under the Securities Exchange Act of 1934
(Amendment No. 5)*

Cytokinetics, Incorporated

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

23282W100

(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)

* 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 (the "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. NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Credit Suisse AG
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)
(b)
3. SEC USE ONLY
4. CITIZENSHIP OR PLACE OF ORGANIZATION

Switzerland
- | | | |
|--|-----------------------------|--|
| | 5. SOLE VOTING POWER | 0 |
| NUMBER OF SHARES
BENEFICIALLY OWNED BY
EACH REPORTING PERSON
WITH | 6. SHARED VOTING POWER | 1,378,878 - 4,049,765 are held in a Voting Trust (See Exhibit
99.2) |
| | 7. SOLE DISPOSITIVE POWER | 0 |
| | 8. SHARED DISPOSITIVE POWER | 5,428,643 |
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

5,428,643
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.91%
12. TYPE OF REPORTING PERSON

BK

Item 1.

- (a) **Name of Issuer**
Cytokinetics, Incorporated
- (b) **Address of Issuer's Principal Executive Offices**
280 East Grand Avenue
South San Francisco
California 94080
United States of America

Item 2.

- (a) **Name of Person Filing**
Credit Suisse AG.
See Exhibit 99.1 and Exhibit 99.2
- (b) **Address of Principal Business Office or, if None, Residence**
Uetlibergstrasse 231, P.O. Box 900, CH 8070 Zurich , Switzerland
- (c) **Citizenship**
Switzerland
- (d) **Title of Class of Securities**
Common Stock, par value \$0.001
- (e) **CUSIP Number**
23282W100

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:

- (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 Rule 240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 240.13d-1(b)(1)(ii)(G);
- (h) A savings association 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) Group, in accordance with Rule 240.13d-1(b)(1)(ii)(J).

Item 4.**Ownership.**

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount Beneficially Owned:
5,428,643
- (b) Percent of Class:
8.91%
- (c) Number of shares as to which such person has:
- | | |
|--|-----------|
| (i) sole power to vote or to direct the vote | 0 |
| shared power to vote or to direct the vote | 1,378,878 |
| (ii) | |
| (iii) sole power to dispose or to direct the disposition of | 0 |
| (iv) shared power to dispose or to direct the disposition of | 5,428,643 |

Item 5.**Ownership of Five Percent or Less of 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 or Control Person.

See Exhibit 99.1

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 acquired and are held in the ordinary course of business and 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 my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 23, 2010

Credit Suisse

By: /s/ Ivy Dodes

Name: Ivy Dodes

Title: Managing Director

Exhibit 99.1

In accordance with Securities and Exchange Commission Release No. 34-39538 (January 12, 1998), this Statement is being filed by Credit Suisse AG (the "Bank"), a Swiss bank, on behalf of its subsidiaries to the extent that they constitute the Investment Banking division (the "Investment Banking division"), the Alternative Investments business (the "AI Business") within the Asset Management division (the "Asset Management division") and the U.S. private client services business (the "U.S. PCS Business") within the Private Banking division (the "Private Banking division") (the "Reporting Person"). The address of the principal business and office of the Bank is Uetlibergstrasse 231, P.O. Box 900, CH 8070 Zurich, Switzerland. The address of the principal business and office of the Reporting Person in the United States is Eleven Madison Avenue, New York, New York 10010. The ultimate parent company of the Bank is Credit Suisse Group AG ("CSG"), a corporation formed under the laws of Switzerland. CSG is a global financial services company, active in all major financial centers and providing a comprehensive range of banking products. The Bank is comprised of the Investment Banking division, the Asset Management division and the Private Banking division. The Investment Banking division provides financial advisory and capital raising services and sales and trading to institutional, corporate and government clients worldwide. The Asset Management division provides asset management and investment advisory services to institutional, mutual fund and private investors worldwide and offers products across a broad range of investment classes, including alternative investments. The Private Banking division offers global private banking and corporate and retail banking services in Switzerland. The business address of CSG is Paradeplatz 8, P.O. Box 1, CH 8070 Zurich, Switzerland. CSG, for purposes of the federal securities laws, may be deemed ultimately to control the Bank and the Reporting Person. CSG, its executive officers and directors, and its direct and indirect subsidiaries (including those subsidiaries that constitute the Asset Management division (other than the AI Business) (the "Traditional AM Business") and the Private Banking division (other than the U.S. PCS Business (the "Non-U.S. PB Business"))) may beneficially own Shares to which this Statement relates (the "Shares") and such Shares are not reported in this Statement. CSG disclaims beneficial ownership of Shares beneficially owned by its direct and indirect subsidiaries, including the Reporting Person. Each of the Traditional AM Business and the Non-U.S. PB Business disclaims beneficial ownership of Shares beneficially owned by the Reporting Person. The Reporting Person disclaims beneficial ownership of Shares beneficially owned by CSG, the Traditional AM Business and the Non-U.S. PB Business.

Exhibit 99.2

Credit Suisse First Boston Equity Partners, L.P., Credit Suisse First Boston Equity Partners (Bermuda), L.P., Credit Suisse First Boston U.S. Executive Advisors, L.P., EMA Partners Fund 2000, L.P. and EMA Private Equity Fund 2000, L.P. (collectively, the "Credit Suisse Entities"), entered into a Voting Trust Agreement with Wells Fargo Bank, N.A. (the "Trustee") on May 2, 2004 (the "Voting Trust Agreement"), pursuant to which, among other things, the Credit Suisse Entities have deposited an aggregate of 4,049,765 shares of common stock (which number includes 761,420 shares of common stock issuable upon exercise of warrants) representing 6.6% of the outstanding shares of common stock as of December 31, 2009 (the "Trustee Shares") into a trust created by the Voting Trust Agreement and gave the Trustee exclusive right to vote the Trustee Shares. While the Trustee has the exclusive right to vote the Trustee Shares, the Credit Suisse Entities maintained and continue to have dispositive power over the Trustee Shares.