

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

SCHEDULE 13G

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

Cytokinetics, Incorporated

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

23282W 10 0

(CUSIP Number)

December 31, 2004

(Date of Event Which Requires Filing of this Statement)

Ivy Dodes
Credit Suisse First Boston
Eleven Madison Avenue
New York, New York 10010
(212) 325-2000

(Name, Address and Telephone Number of Person Authorized to Receive
Notices and Communications)

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. 23282W 10 0

13G

1 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Credit Suisse First Boston, on behalf of the Credit Suisse First Boston
business unit

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a) | _ |

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

3,145,210

7 SOLE DISPOSITIVE POWER

-0-

8 SHARED DISPOSITIVE POWER

3,145,210

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,145,210

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

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

11.1%

12 TYPE OF REPORTING PERSON*

BK, HC

*SEE INSTRUCTION BEFORE FILLING OUT!

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

Item 2.

(a) Name of Persons Filing:

Credit Suisse First Boston, on behalf of the Credit Suisse First
Boston business unit. See Schedule I.

(b) Address of Principal Business Office:

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 per share

(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(n):

- (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 (15 U.S.C. 80a-8)
- (e) Person registered as an investment adviser under Section 203 of the Investment Advisers Act of 1940 (15 U.S.C. 80b-3) or under the laws of any state.
- (f) Employee Benefit Plan or Endowment Fund in accordance with ss.240.13d-1(b)(1)(ii)(F)
- (g) Parent Holding Company or Control Person in accordance with ss.240.13d-1(b)(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 of 1940 (15 U.S.C. 80a-3)
- (j) Group in accordance with ss.240.13d-1(b)(1)(ii)(J)

Item 4. Ownership

- (a) Amount Beneficially Owned:
See response to Item 9 on page 2.
- (b) Percent of Class:
See response to Item 11 on page 2.
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or to direct the vote:
See response to Item 5 on page 2.
 - (ii) Shared power to vote or to direct the vote:
See response to Item 6 on page 2.
 - (iii) Sole power to dispose or to direct the disposition of:
See response to Item 7 on page 2.
 - (iv) Shared power to direct the disposition of:
See response to Item 8 on page 2.

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

See Schedule I.

- Item 8. Identification and Classification of Members of the Group
Not Applicable
- Item 9. Notice of Dissolution of Group
Not Applicable
- Item 10. Certification
Not Applicable

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.

February 11, 2005

CREDIT SUISSE FIRST BOSTON,
solely on behalf of the CREDIT
SUISSE FIRST BOSTON
BUSINESS UNIT

By: /s/ Ivy Dodes

Name: Ivy Dodes
Title: Managing Director

Schedule I

In accordance with Securities and Exchange Commission Release No. 34-39538 (January 12, 1998), this Schedule 13G is being filed by Credit Suisse First Boston (the "Bank"), a Swiss bank, on behalf of itself and its subsidiaries, to the extent that they constitute the Credit Suisse First Boston business unit (the "CSFB business unit") excluding Asset Management (as defined below) (the "Reporting Person"). The CSFB business unit is also comprised of an asset management business principally conducted under the brand name Credit Suisse Asset Management ("Asset Management"). The Reporting Person provides financial advisory and capital raising services, sales and trading for users and suppliers of capital around the world and invests in and manages private equity and venture capital funds. Asset Management provides asset management and investment advisory services to institutional, mutual fund and private investors worldwide. The address of the Bank's principal business and office is Uetlibergstrasse 231, P.O. Box 900, CH 8070 Zurich, Switzerland. The address of the Reporting Person's principal business and office in the United States is Eleven Madison Avenue, New York, New York 10010.

The ultimate parent company of the Bank is Credit Suisse Group ("CSG"), a corporation formed under the laws of Switzerland. CSG is a global financial services company with three distinct business units. In addition to the CSFB business unit, CSG and its consolidated subsidiaries are comprised of the Credit Suisse business unit (the "Credit Suisse business unit") and the Winterthur business unit (the "Winterthur business unit"). The Credit Suisse business unit offers global private banking and corporate and retail banking services in Switzerland. The Winterthur business unit provides life and non-life insurance and pension products to private and corporate clients worldwide. CSG's business address 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 Asset Management, the Credit Suisse business unit and the Winterthur business

unit) may beneficially own securities 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 Asset Management, the Credit Suisse business unit and the Winterthur business unit disclaims beneficial ownership of Shares beneficially owned by the Reporting Person. The Reporting Person disclaims beneficial ownership of Shares beneficially owned by CSG, Asset Management, the Credit Suisse business unit and the Winterthur business unit.