

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

FORM S-3
REGISTRATION STATEMENT
Under
The Securities Act of 1933

CYTOKINETICS, INCORPORATED

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-3291317
(I.R.S. Employer
Identification Number)

**280 East Grand Avenue
South San Francisco, California 94080
(650) 624-3000**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Robert I. Blum
President & Chief Executive Officer
Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
(650) 624-3000**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Robert Jones
Michael Tenta
Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304
(650) 843-5000**

Approximate date of commencement of proposed sale to the public: From time to time after effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. 333-178189

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee (2)
Common Stock, \$0.001 par value	(1)(2)(3)	(1)	(1)(2)(3)	—
Preferred Stock, \$0.001 par value	(1)(2)(3)	(1)	(1)(2)(3)	—
Warrants	(1)(2)(3)	(1)	(1)(2)(3)	—
Total			\$20,000,000	\$2,292

- (1) Not specified as to each class of securities to be registered, pursuant to General Instruction II.D of Form S-3 under the Securities Act of 1933, as amended.
- (2) The Registrant previously registered such indeterminate amount and number of each identified class of the identified securities up to a proposed maximum aggregate offering price of \$100,000,000 on a Registration Statement on Form S-3 (File No. 333-178189) on November 25, 2011, which was declared effective on December 8, 2011. In accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended, an additional indeterminate amount and number of each identified class of the identified securities as shall have an aggregate offering price not to exceed \$20,000,000 are being registered hereunder, which may be offered from time to time at indeterminate prices, including securities that may be purchased by underwriters. Registration fees are calculated pursuant to Rule 457(o) under the Securities Act of 1933. The proposed maximum offering price per share will be determined, from time to time, by the Registrant in connection with the issuance by the Registrant of the securities registered hereunder.
- (3) The Registrant is hereby registering an indeterminate amount and number of each identified class of the identified securities as may be issued upon conversion, exchange or exercise of any other securities that provide for such conversion, exchange or exercise, or pursuant to the antidilution provisions of any of such securities. In addition, pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) of the Securities Act of 1933, as amended.

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This Registration Statement is being filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended, or Rule 462(b), and General Instruction IV.A. to Form S-3 to register the Registrant's common stock, preferred stock and warrants, individually or in combination with other securities, including common stock upon conversion of preferred stock, and common stock or preferred stock upon the exercise of warrants, with an aggregate initial offering price not to exceed \$20,000,000. In accordance with Rule 462(b), this Registration Statement incorporates by reference the contents of the Registrant's Registration Statement on Form S-3 (File No. 333-178189), filed with the Securities and Exchange Commission, or the SEC, on November 25, 2011, and declared effective by the SEC on December 8, 2011, including all exhibits thereto and all information incorporated by reference therein, other than the exhibits included herein.

The required opinion and consents are listed on the Exhibit Index attached to and filed with this registration statement.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, State of California, on June 20, 2012.

CYTOKINETICS, INCORPORATED

By: /s/ Robert I. Blum
 Robert I. Blum
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Robert I. Blum</u> Robert I. Blum	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	June 20, 2012
<u>/s/ Sharon A. Barbari</u> Sharon A. Barbari	Executive Vice President, Finance and Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	June 20, 2012
<u>/s/ L. Patrick Gage</u> L. Patrick Gage, Ph.D.	Chairman of the Board of Directors	June 20, 2012
_____ Stephen Dow	Director	
_____ Denise M. Gilbert, Ph.D.	Director	
<u>/s/ John Henderson, M.B., Ch.B.</u> John Henderson, M.B. Ch.B.	Director	June 20, 2012
<u>/s/ Santo Costa</u> Santo J. Costa	Director	June 20, 2012
<u>/s/ Sandford Smith</u> Sandford Smith	Director	June 20, 2012
<u>/s/ Wendell Wierenga, Ph.D.</u> Wendell Wierenga, Ph.D.	Director	June 20, 2012

INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
5.1	Opinion of Cooley LLP.
23.1	Consent of PricewaterhouseCoopers, LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP is contained in Exhibit 5.1 to this Registration Statement.



Michael E. Tenta
T: +1 650 843 5636
mtenta@cooley.com

June 20, 2012

Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, CA 94080

Ladies and Gentlemen:

We have acted as counsel to Cytokinetics, Incorporated, a Delaware corporation (the "**Company**"), in connection with a Registration Statement on Form S-3 (the "**Registration Statement**") to be filed by the Company under the Securities Act of 1933, as amended (the "**Securities Act**") of an indeterminate number of securities of the Company as shall have an aggregate offering price not to exceed \$20,000,000. The Company has provided us with a prospectus that forms part of the Registration Statement (the "**Prospectus**"). The Prospectus provides that it will be supplemented in the future by one or more prospectus supplements (each, a "**Prospectus Supplement**"). The Registration Statement, including the Prospectus (as supplemented from time to time by one or more Prospectus Supplements), will provide for the registration by the Company of:

- shares of Common Stock issuable pursuant to the Prospectus (as supplemented from time to time by one or more Prospectus Supplements) (the "**Shares**");
- shares of preferred stock, par value \$0.001 per share, of the Company (the "**Preferred Stock**") issuable pursuant to the Prospectus (as supplemented from time to time by one or more Prospectus Supplements); and
- warrants issuable pursuant to the Prospectus (as supplemented from time to time by one or more Prospectus Supplements) to purchase Common Stock or Preferred Stock (the "**Warrants**"), which may be issued under warrant agreements, to be dated on or about the date of the first issuance of the applicable Warrants thereunder, by and between a warrant agent to be selected by the Company (the "**Warrant Agent**") and the Company, in the forms filed as Exhibits 4.4 and 4.5 to the Registration Statement (each, a "**Warrant Agreement**"); and

The Shares, the Preferred Stock and the Warrants are collectively referred to herein as the "**Securities**." The Securities are being registered for offer and sale from time to time pursuant to either or both of Rule 415 and Rule 462(b) under the Securities Act. The aggregate public offering price of the Securities being registered will be \$20,000,000.

In connection with this opinion, we have examined and relied upon originals, or copies certified to our satisfaction, of such records, documents, certificates, opinions, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

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In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents where authorization, execution and delivery are prerequisites to the effectiveness of such documents. With respect to our opinion as to the Shares, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Common Stock is authorized and available for issuance and that the consideration for the issuance and sale of the Shares (or Preferred Stock convertible into Common Stock or Warrants exercisable for Common Stock) is in an amount that is not less than the par value of the Common Stock. With respect to our opinion as to the Preferred Stock, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Preferred Stock is authorized, designated and available for issuance and that the consideration for the issuance and sale of the Preferred Stock (or Warrants exercisable for Preferred Stock) is in an amount that is not less than the par value of the Preferred Stock. We have also assumed that any Warrants offered under the Registration Statement, and the related Warrant Agreement, will be executed in the forms filed as exhibits to the Registration Statement or incorporated by reference therein. We have also assumed that (i) with respect to Securities being issued upon conversion of any convertible Preferred Stock, the applicable convertible Preferred Stock will be duly authorized, validly issued, fully paid and nonassessable; and (ii) with respect to any Securities being issued upon exercise of any Warrants, the applicable Warrants will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

Our opinion herein is expressed solely with respect to the federal laws of the United States, the Delaware General Corporation Law and, as to the Warrants constituting valid and legally binding obligations of the Company, solely with respect to the laws of the State of New York. Our opinion is based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that:

1. With respect to the Shares offered under the Registration Statement, provided that: (i) the Registration Statement and any required post-effective amendment thereto have all become effective under the Securities Act and the Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the issuance of the Shares has been duly authorized by all necessary corporate action on the part of the Company; (iii) the issuance and sale of the Shares do not violate any applicable law, are in conformity with the Company's then operative certificate of incorporation

(the "*Certificate of Incorporation*") and bylaws (the "*Bylaws*"), do not result in a default under or breach of any agreement or instrument binding upon the Company and comply with any applicable requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (iv) the certificates for the Shares have been duly executed by the Company, countersigned by the transfer agent therefor and duly delivered to the purchasers thereof against payment therefor, then the Shares when issued and sold as contemplated in the Registration Statement, the Prospectus and the related Prospectus Supplement(s), and in accordance with a duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon conversion of any convertible Preferred Stock in accordance with their terms, or upon exercise of any Warrants in accordance with their terms, will be duly authorized, validly issued, fully paid and nonassessable.

2. With respect to the Preferred Stock offered under the Registration Statement, provided that: (i) the Registration Statement and any required post-effective amendment thereto have all become effective under the Securities Act and the Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the terms and issuance of the Preferred Stock have been duly authorized by all necessary corporate action on the part of the Company; (iii) the terms of the shares of Preferred Stock and their issuance and sale do not violate any applicable law, are in conformity with the Certificate of Incorporation and Bylaws, do not result in a default under or breach of any agreement or instrument binding upon the Company and comply with any applicable requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (iv) the certificates for the Preferred Stock have been duly executed by the Company, countersigned by the transfer agent therefor and duly delivered to the purchasers thereof against payment therefor, then the Preferred Stock, when issued and sold as contemplated in the Registration Statement, the Prospectus and the related Prospectus Supplement(s) and in accordance with any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon exercise of any Warrants in accordance with their terms, will be duly authorized, validly issued, fully paid and nonassessable.

3. With respect to the Warrants issued under a Warrant Agreement and offered under the Registration Statement, provided that (i) the Registration Statement and any required post-effective amendment thereto have all become effective under the Securities Act and the Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the Warrant Agreement has been duly authorized by the Company and the Warrant Agent by all necessary corporate action; (iii) the Warrant Agreement has been duly executed and delivered by the Company and the Warrant Agent; (iv) the issuance and terms of the Warrants have been duly authorized by the Company by all necessary corporate action; (v) the terms of the Warrants and of their issuance and sale have been duly established in conformity with the Warrant Agreement and as described in the Registration Statement, the Prospectus and the related Prospectus Supplement(s), so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company, so as to be in conformity with the Certificate of Incorporation and Bylaws, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (vi) the Warrants have been duly executed and delivered by the Company and authenticated by the Warrant Agent pursuant to



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the Warrant Agreement and delivered against payment therefor, then the Warrants, when issued and sold as contemplated in the Registration Statement, the Prospectus and the Prospectus Supplement(s) and in accordance with the Warrant Agreement and a duly authorized, executed and delivered purchase, underwriting or similar agreement, will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally, and by general equitable principles (regardless of whether such enforceability is considered in a proceeding at law or in equity).

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectuses included in the Registration Statement. This opinion is expressed as of the date hereof, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law.

Sincerely,

Cooley LLP

By: /s/ Michael E. Tenta
Michael E. Tenta

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 13, 2012, relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Cytokinetics, Incorporated's Annual Report on Form 10-K for the year ended December 31, 2011.

/s/ PricewaterhouseCoopers LLP
San Jose, CA
June 19, 2012