UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 13, 2005

CYTOKINETICS, INCORPORATED

(Exact name of registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of incorporation)

000-50633 (Commission File Number) 94-3291317 (IRS Employer Identification No.)

280 East Grand Avenue South San Francisco, California 94080 (Address of principal executive offices, including zip code)

650-624-3000

(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. OTHER EVENTS.

On December 13, 2005, Cytokinetics, Incorporated (the "Company") issued a press release related to the announcement of the selection of a third development candidate, GSK-923295, under our strategic alliance with GlaxoSmithKline. A copy of this press release is being filed with this Current Report on Form 8-K, is attached hereto as Exhibit 99.1, and is hereby incorporated by reference into this Item 8.01.

Item 9.01. FINANCIAL STATEMENTS AND EXHIBITS.

(c) Exhibits.

The following Exhibit is filed as part of this Current Report on Form 8-K:

 Exhibit No.
 Description

 99.1
 Press release dated December 13, 2005, announcing selection of third development candidate under strategic alliance with GlaxoSmithKline.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CYTOKINETICS, INCORPORATED

By: /s/ James H. Sabry James H. Sabry President and Chief Executive Officer

Date: December 14, 2005

EXHIBIT INDEX

Exhibit No. 99.1

Description
Press release dated December 13, 2005, announcing selection of third development candidate under strategic alliance with
GlaxoSmithKline.

Contacts:

Cytokinetics, Incorporated Robert I. Blum EVP, Corporate Development and Commercial Operations & CBO (650) 624-3000 Burns McClellan, Inc. Clay Kramer (investors) Justin Jackson (media) (212) 213-0006

CYTOKINETICS ANNOUNCES SELECTION OF DEVELOPMENT CANDIDATE DIRECTED TO SECOND MITOTIC KINESIN TARGET

Third Development Candidate under Collaboration with GlaxoSmithKline Expands Portfolio of Mitotic Kinesin Inhibitors and Triggers Milestone Payment

South San Francisco, CA, December 13, 2005 – Cytokinetics, Incorporated (Nasdaq: CYTK) announced today that GlaxoSmithKline (GSK) has selected a novel small molecule development candidate, GSK-923295, directed against a second mitotic kinesin target, centromere-associated protein E (CENP-E), under the broad strategic alliance between the companies. The compound is the third development candidate to emerge from the strategic alliance, which is focused on novel small molecule therapeutics targeting human mitotic kinesins for applications in the treatment of cancer and other diseases.

The selection of the development candidate triggers a milestone payment of \$500,000 from GSK to Cytokinetics under the terms of the companies' collaboration established in June 2001. Cytokinetics previously received a milestone payment from GSK triggered by the advancement of the previously undisclosed target of this compound under collaborative research in 2004. CENP-E is directly involved in coupling the mechanics of mitosis with the mitotic checkpoint signaling machinery, regulating cell-cycle transition from metaphase to anaphase. CENP-E is also essential for prometaphase chromosome movements that contribute to metaphase chromosome alignment. These processes are essential to cell proliferation.

GSK-923295 exhibits properties in *in vitro* and *in vivo* preclinical studies that distinguish it from the two previously selected development candidates, which are directed to a distinct mitotic kinesin target, kinesin spindle protein (KSP), and are currently in clinical development. The most advanced KSP inhibitor, *ispinesib* (SB-715992), is the subject of a broad clinical trials development program being conducted by GSK and the National Cancer Institute comprising nine Phase II and five Phase I/Ib clinical trials. The second structurally distinct KSP inhibitor, SB-743921, is being evaluated in an ongoing Phase I clinical trial being conducted by GSK. Cytokinetics is responsible for leading and funding development activities to explore the potential application of SB-743921 for the treatment of non-Hodgkin's lymphoma, Hodgkin's lymphoma and multiple myeloma, subject to the option for GSK to resume responsibility for development and commercialization activities for SB-743921 for these indications during a defined period. Cytokinetics plans to initiate a Phase I/II clinical trial in non-Hodgkin's lymphoma in 2005. These development activities for SB-743921 will be conducted in parallel with GSK's conduct of development activities for SB-743921 in other indications and for *ispinesib*.

"When establishing the alliance, the companies anticipated that multiple anti-mitotic drug candidates might arise from this fertile area for collaborative research," stated David J. Morgans, Jr., Ph.D., Cytokinetics' Senior Vice President, Drug Discovery and Development. "Addition of this development compound to our portfolio is evidence of the productivity under our collaboration with GSK and affords us the opportunity to more broadly test the hypothesis that mitotic kinesin inhibitors may be promising products in oncology and other therapeutic areas."

Background on Cytokinetics and GlaxoSmithKline Strategic Alliance

In June 2001, Cytokinetics and GSK announced that the two companies had entered into a broad strategic collaboration to discover, develop and commercialize novel small molecule therapeutics targeting mitotic

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kinesins for applications in the treatment of cancer and other diseases. Under the original terms of the agreement, GSK committed funding of approximately \$50 million over the minimum 5-year research term, including a \$14 million upfront cash payment and a \$14 million purchase of Cytokinetics preferred stock. In addition, GSK could make milestone payments to Cytokinetics of up to an aggregate of \$30-50 million per target for products directed to each mitotic kinesin target. GSK is responsible for worldwide development and commercialization of products arising from the collaboration. Cytokinetics will receive royalties from the sale of any resulting products. In addition, Cytokinetics retains a product-by-product option to co-fund certain development activities, thereby increasing its royalty and affording co-promotion rights in North America. During the collaboration, targets may rever to Cytokinetics for independent research and development, with GSK retaining an option to resume joint activities. In September 2005, Cytokinetics' expanded role under the amendment in the development to SB-743921, Cytokinetics may receive additional pre-commercialization payments from GSK based on the achievement of certain milestones for SB-743921 under certain scenarios.

Background on Mitotic Kinesin Inhibitors

Since their introduction over 40 years ago, anti-mitotic drugs (taxanes and vinca alkaloids) have advanced the treatment of cancer and are commonly used for the treatment of several tumor types. However, these drugs have demonstrated limited treatment benefit against certain cancers. In addition, these drugs target tubulin, a cytoskeletal protein involved not only in mitosis and cell proliferation, but also in other important cellular functions. Inhibition of these other cellular functions produces dose-limiting toxicities such as peripheral neuropathy, an impairment of the peripheral nervous system. Neuropathies result when these drugs interfere with the dynamics of microtubule filaments that are responsible for the long-distance transport of important cellular components within nerve cells.

Mitotic kinesins are essential to mitosis, and, unlike tubulin, appear to have no role in unrelated cellular functions. We believe that drugs that inhibit KSP and CENP-E and other mitotic kinesins may represent the next generation of anti-mitotic cancer drugs by arresting mitosis and cell proliferation without impacting unrelated, normal cellular functions, avoiding many of the toxicities commonly experienced by patients treated with existing anti-mitotic drugs.

About Cytokinetics

Cytokinetics is a leading biopharmaceutical company focused on the discovery, development and commercialization of novel small molecule drugs that specifically target the cytoskeleton. The cytoskeleton is a complex biological infrastructure that plays a fundamental role within every human cell. Cytokinetics' focus on the cytoskeleton enables it to develop novel and potentially safer and more effective classes of drugs directed at treatments for cancer, cardiovascular disease and other diseases. Cytokinetics has developed a cell biology driven approach and proprietary technologies to evaluate the function of many interacting proteins in the complex environment of the intact human cell. Cytokinetics employs the PUMATM system and CytometrixTM technologies to enable early identification and automated prioritization of compounds that are highly selective for their intended protein targets without other cellular effects, and may therefore be less likely to give rise to clinical side effects. Cytokinetics and GlaxoSmithKline have entered into a strategic alliance to discover, develop and commercialize small molecule therapeutics targeting human mitotic kinesins for applications in the treatment of cancer and other diseases. GlaxoSmithKline is conducting Phase II and Phase Ib clinical trials for *ispinesib* (SB-715992) and a Phase I clinical trial for SB-743921, each a drug candidate that has emerged from the strategic alliance. Cytokinetics' heart failure program is the second program to leverage the company's expertise in cytoskeletal pharmacology. Cytokinetics recently initiated a Phase I clinical trial with CK-1827452, a novel small molecule cardiac myosin activator, for the treatment of heart failure. Additional information about Cytokinetics can be obtained at www.cytokinetics.com.

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This press release contains forward-looking statements for purposes of the Private Securities Litigation Reform Act of 1995 (the "Act"). Cytokinetics disclaims any intent or obligation to update these forward-looking statements, and claims the protection of the Safe Harbor for forward-looking statements contained in the Act. Examples of such statements include, but are not limited to, statements regarding the scope of and timing of clinical trials of SB-743921, statements regarding potential milestone payments under our strategic alliance with GSK, and statements regarding the potential benefits of our drug candidates and potential drug candidates and the enabling capabilities of our proprietary technologies and biological focus. Such statements are based on management's current expectations, but actual results may differ materially due to various factors. Such statements involve risks and uncertainties relating to difficulties or delays in development, testing, regulatory approval, production and marketing of Cytokinetics' drug candidates and potential to uncertainty of patent protection for Cytokinetics' intellectual property or trade secrets, Cytokinetics' ability to obtain additional financing if necessary and unanticipated research and development and other costs). For further information regarding these and other risks related to Cytokinetics' business, investors should consult Cytokinetics' filings with the Securities and Exchange Commission.

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