
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 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):

November 10, 2006

Cytokinetics, Incorporated

(Exact name of registrant as specified in its charter)

Delaware

000-50633

94-3291317

(State or other jurisdiction
of incorporation)

(Commission
File Number)

(I.R.S. Employer
Identification No.)

280 East Grand Avenue, South San Francisco,
California

94080

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code:

(650) 624 - 3000

Not Applicable

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:

- 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)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 8.01 Other Events.

On November 10, 2006 Cytokinetics, Incorporated issued a press release announcing the presentation of data from a Phase Ib combination clinical trial of ispinesib and a non-clinical study of SB-743921, both novel inhibitors of kinesin spindle protein (KSP). The data were presented at the 18th Annual EORTC-NCI-AACR Symposium on Molecular Targets and Cancer Therapeutics in Prague, Czech Republic. A copy of this press release is being filed with this Current Report on Form 8-K, 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 November 10, 2006.

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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

November 10, 2006

By: *James H. Sabry*

Name: James H. Sabry
Title: Chief Executive Officer

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release, dated November 10, 2006.

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**CYTKINETICS ANNOUNCES CLINICAL TRIAL DATA WITH *ISPINESIB*
AND NON-CLINICAL DATA WITH SB-743921 AT THE EORTC-NCI-AACR SYMPOSIUM**

Data from a Phase Ib Clinical Trial Evaluating Combination of Ispinesib and Capecitabine Presented

South San Francisco, CA, November 10, 2006 – Cytokinetics, Incorporated (Nasdaq: CYTK) announced the presentation of data from a Phase Ib combination clinical trial of *ispinesib* and a non-clinical study of SB-743921, both novel inhibitors of kinesin spindle protein (KSP). The data were presented at the 18th Annual EORTC-NCI-AACR Symposium on Molecular Targets and Cancer Therapeutics in Prague, Czech Republic.

The clinical trial poster presentation entitled, “Phase I Study of *Ispinesib* (SB-715992), a Kinesin Spindle Protein Inhibitor, in Combination with *Capecitabine* in Patients with Advanced Solid Tumors,” contained data arising from an ongoing clinical trial that has demonstrated that the combination of *ispinesib* and *capecitabine* may have an acceptable tolerability profile on the study’s treatment schedule. The optimally tolerated dose (OTR) in this clinical trial has yet to be defined, however, the maximum tolerated dose (MTD) of *ispinesib* of 18 mg/m², administered as an intravenous infusion every 21 days, was tolerated with therapeutic doses of *capecitabine*, specifically daily oral doses of 2000 mg/m² and 2500 mg/m² for 14 days, and plasma concentrations of *ispinesib* were not affected by the presence of *capecitabine*.

Dose limiting toxicities were observed consisting of Grade 2 rash (n=1) that did not allow 75% of the *capecitabine* doses to be delivered and prolonged Grade 4 neutropenia (n=2). Common toxicities observed in these patients included fatigue, anorexia, nausea, infections, hypokalemia, neutropenia, diarrhea, hand-foot syndrome, leucopenia and vomiting.

In this clinical trial, a total of 12 patients, including 4 with breast cancer, 3 with colorectal cancer, 3 with bladder cancer, 1 with thyroid cancer and 1 with tongue cancer, out of 24 total patients had a best response of stable disease by RECIST criteria (median 2.25, duration 2-12 months). A patient with breast cancer had the longest duration of stable disease at 12 months.

In addition, a poster entitled, “Sequence Dependent Anti-Tumor Activity of *Bortezomib* and the KSP Inhibitor, SB-743921, in a Solid Tumor Xenograft Model,” was presented containing data arising from non-clinical research and which characterized anti-tumor activities of SB-743921 in a solid tumor xenograft model and its potential in combination with *bortezomib*. In solid tumor xenograft models, it was determined that protease inhibition enhanced anti-tumor activity of KSP inhibitors, *in vitro* and *in vivo*. Greater anti-tumor activity was observed when SB-743921 was administered simultaneously with or 24 hours prior to administration of *bortezomib*. However, dosing of *bortezomib* prior to SB-743921 was not significantly more effective than either single agent. Both agents can be combined at single agent MTD dosing levels. The anti-tumor activity of this combination suggests that further exploration of this combination may be warranted.

“We are very pleased with these data, as these presentations focus to the potential combinability of KSP inhibitors with other standard cancer treatments,” stated Dr. Andrew A. Wolff, Cytokinetics’ Senior Vice President of Clinical Research and Development and Chief Medical Officer. “We look forward to the further evaluation of both *ispinesib* and SB-743921 in combination regimens and as they may contribute to the treatment of cancer patients.”

Background on KSP 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.

Cytokinetics and GlaxoSmithKline (GSK) established a broad strategic alliance in 2001 to discover, develop and commercialize novel small molecule therapeutics targeting human mitotic kinesins for applications in the treatment of cancer and other diseases. This strategic alliance has yielded two novel drug candidates focused to the inhibition of KSP, *ispinesib* (SB-715992) and SB-743921. *Ispinesib* and SB-743921 are structurally distinct small molecule compounds that modulate cell proliferation and promote cancer cell death by specifically inhibiting kinesin spindle protein (KSP). KSP is a mitotic kinesin that is essential for cell proliferation, a process which when unregulated, results in tumor growth. 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 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 *Ispinesib*

Ispinesib is a novel small molecule inhibitor of KSP, a mitotic kinesin protein essential for proper cell division. *Ispinesib* is the first drug candidate in clinical development that has arisen from the strategic alliance between Cytokinetics and GSK. GSK is conducting a broad clinical trials program for *ispinesib* designed to study this drug candidate in multiple tumor types, combination regimens and dosing schedules. GSK is currently evaluating *ispinesib* in two Phase II clinical trials being conducted in patients with each of ovarian and breast cancers. In addition, GSK has conducted a Phase Ib clinical trial designed to evaluate *ispinesib* in combination with *carboplatin*.

In addition to the ongoing studies being conducted by GSK, the National Cancer Institute (NCI) is conducting three other Phase II clinical trials evaluating *ispinesib* in other tumor types, including, hepatocellular, and prostate cancers and melanoma. In addition, the NCI plans to conduct an additional Phase II clinical trial in patients with renal cell carcinoma. The NCI is also conducting two other Phase I clinical trials evaluating a new schedule of *ispinesib*. One clinical trial is enrolling patients with advanced solid tumors who have failed to respond to all standard therapies, and the second clinical trial is enrolling patients with acute leukemia, chronic myelogenous leukemia, or advanced myelodysplastic syndromes. The NCI is also planning on initiating a Phase I clinical trial evaluating *ispinesib* in the treatment of pediatric patients with solid tumors by the end of 2006.

About SB-743921

SB-743921, Cytokinetics' second KSP inhibitor to enter clinical trials under the strategic alliance with GSK, is structurally distinct from *ispinesib*, Cytokinetics' most advanced drug candidate. In September 2005, Cytokinetics and GSK announced an amendment to their original agreement to support further expansion of the development activities for SB-743921. Under the terms of the amendment, 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 (NHL), Hodgkin's disease and multiple myeloma, subject to GSK's option to resume responsibility for development and commercialization activities for SB-743921 for these indications during a defined period. Cytokinetics' development activities will be conducted in parallel with GSK's development activities for SB-743921 in other indications and for *ispinesib*. In April 2006, Cytokinetics announced the initiation of a Phase I/II clinical trial of SB-743921 in patients with NHL, in connection with an expanded development program for SB-743921. This Phase I/II clinical trial is an open-label, non-randomized study to investigate the safety, tolerability, pharmacokinetic, and pharmacodynamic profile of SB-743921, administered as a one-hour infusion on days 1 and 15 of a 28-day schedule, and to assess the potential efficacy of the maximum tolerated dose of SB-743921 administered on this schedule in patients with NHL.

About Cytokinetics

Cytokinetics is a 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. Under a strategic alliance established in 2001, Cytokinetics and GSK are collaborating to develop and commercialize small molecule therapeutics targeting human mitotic kinesins for applications in the treatment of cancer and other diseases. *Ispinesib* (SB-715992) and SB-743921 are being developed under the strategic alliance with GSK. GSK is conducting Phase II and Ib clinical trials for *ispinesib* and Cytokinetics is conducting a Phase I/II trial of SB-743921 in non-Hodgkin's lymphoma. Cytokinetics' unpartnered cardiovascular disease program is the second program to leverage the company's expertise in cytoskeletal pharmacology. Cytokinetics recently completed a Phase I clinical trial with CK-1827452, a novel small molecule cardiac myosin activator, for the intravenous treatment of heart failure and also is advancing CK-1827452 as a potential drug candidate for the treatment of chronic heart failure via oral administration. Additional information about Cytokinetics can be obtained at <http://www.cytokinetics.com>.

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 relating to the expected timing, scope and results of Cytokinetics' and its partners' clinical development and research programs, including initiation of clinical trials, future presentations concerning Cytokinetics and its partners' research and development programs, anticipated dates of release of data from clinical trials and statements regarding the potential benefits of our drug candidates and potential drug candidates and the enabling capabilities of our proprietary technologies. 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, including, but not limited to, those risks and uncertainties relating to decisions by GSK or the NCI to postpone or discontinue development efforts for one or more compounds, difficulties or delays in patient enrollment for clinical trials, unexpected adverse side effects or inadequate therapeutic efficacy of Cytokinetics' drug candidates and other potential difficulties or delays in development, testing, regulatory approval, production and marketing of Cytokinetics' drug candidates that could slow or prevent clinical development, product approval or market acceptance (including the risks relating 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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