
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):

December 11, 2009

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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[Top of the Form](#)

Item 8.01 Other Events.

On December 11, 2009, Cytokinetics, Incorporated issued a press release announcing that an abstract summarizing non-clinical data relating to GSK-923295, an inhibitor of centromere-associated protein E (CENP-E), was presented as a poster at the 32nd Annual San Antonio Breast Cancer Symposium (SABCS) at the Henry B. Gonzalez Convention Center, San Antonio, Texas. A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K, and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) 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 11, 2009.

[Top of the Form](#)

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

December 11, 2009

By: *Sharon Barbari*

Name: Sharon Barbari
Title: Executive Vice President, Finance and Chief Financial Officer

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release, dated December 11, 2009

Contacts:

Cytokinetics, Incorporated
Christopher S. Keenan (Investors and Media)
Director, Investor Relations
(650) 624-3000

**CYTOKINETICS ANNOUNCES NON-CLINICAL DATA RELATING TO GSK-923295
PRESENTED AT THE 32ND ANNUAL SAN ANTONIO BREAST CANCER SYMPOSIUM**

South San Francisco, CA, December 11, 2009 – Cytokinetics, Incorporated (Nasdaq: CYTK) announced today that an abstract summarizing non-clinical data relating to GSK-923295, an inhibitor of centromere-associated protein E (CENP-E), was presented as a poster at the 32nd Annual San Antonio Breast Cancer Symposium (SABCS) at the Henry B. Gonzalez Convention Center, San Antonio, Texas.

“We are pleased that these data could be shared with the clinical investigative community at the San Antonio Breast Cancer Symposium,” stated David J. Morgans, PhD, Cytokinetics’ Executive Vice President of Preclinical Research and Development. “These results lay the foundation for an approach to identify patient subpopulations that may be more responsive to GSK-923295 thereby defining the possibility for targeted use of this compound in the clinic.”

Poster Presentation at SABCS

A poster titled, “A Systems Analysis of Mitotic Apparatus Inhibitors Defines a Response Network for Breast Cancer,” was presented by Zhi Hu, Life Sciences Division, Lawrence Berkeley National Laboratory, Berkeley, CA summarizing a non-clinical research evaluating inhibitors of the mitotic apparatus, including GSK-923295. The authors studied inhibitors of the mitotic apparatus, including inhibitors of PLK1, CENP-E and AURKB, with the goal of identifying biomarkers of therapeutic response that could be used to identify responsive subpopulations of patients. In this analysis, the compounds GSK461364, GSK-923295 and GSK1070916, small molecules which inhibit PLK1, CENP-E and AURKB, respectively, were tested in a panel of 54 breast cancer cells. The authors identified a network of 54 genes encoding proteins of the mitotic apparatus that is transcriptionally active in subtypes of breast cancer cell lines and primary tumors. In breast cancer cell lines with high mitotic network activity, the small molecule inhibitors of PLK1, CENP-E, and AURKB were found to be preferentially effective.

Development Status of GSK-923295

GSK-923295 is being studied in a GlaxoSmithKline (GSK) sponsored Phase I, first-time-in-humans clinical trial designed to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of this novel drug candidate in patients with advanced, refractory solid tumors. The primary objective of this trial is to determine the maximum-tolerated dose (MTD), dose-limiting toxicity (DLT), safety and pharmacokinetics of GSK-923295 in these patients. In October 2008, GSK reported interim data from this trial. The authors concluded that GSK-923295 was well-tolerated at doses evaluated to date, which ranged from 10-105 mg/m². Of the adverse events observed, nausea and fatigue (all less than or equal to grade 2) were the most frequent non-hematological toxicities, and anemia (all less than or equal to grade 2) was the most frequent hematological toxicity. In addition, no neurotoxicity was observed. The MTD had not been reached but one DLT was observed in the form of reversible aspartate aminotransferase (AST) elevation. Finally, the authors concluded that the plasma pharmacokinetics of GSK-923295 observed were dose-proportional and exhibited low intra-patient and modest inter-patient variability.

In December 2009, Cytokinetics announced that it agreed with GSK to terminate their collaboration and license agreement, effective February 28, 2010. As a result, all rights for GSK-923295 will revert to Cytokinetics effective February 28, 2010. GSK remains responsible for all activities and costs associated with completing and reporting on the ongoing Phase I clinical trial of GSK-923295.

About Cytokinetics

Cytokinetics is a clinical-stage biopharmaceutical company focused on the discovery and development of small molecule therapeutics that modulate muscle function for the potential treatment of serious diseases and medical conditions. Cytokinetics’ lead drug candidate from its cardiac muscle contractility program, *omecactiv mecarbil* (formerly CK-1827452), is in Phase II clinical development for the potential treatment of heart failure. Amgen Inc. holds an exclusive license worldwide (excluding Japan) to develop and commercialize *omecactiv mecarbil* and related compounds, subject to Cytokinetics’ specified development and commercialization participation rights. Cytokinetics is independently developing CK-2017357, a skeletal muscle activator, as a potential treatment for diseases and conditions associated with aging, muscle wasting or neuromuscular dysfunction. CK-2017357 is in Phase I clinical development. Cytokinetics is also conducting non-clinical development of compounds that inhibit smooth muscle contractility and which may be useful as potential treatments for diseases and conditions such as systemic hypertension, pulmonary arterial hypertension or bronchoconstriction. In addition, prior Cytokinetics’ research generated three anti-cancer drug candidates in Phase I clinical development: *ispinesib*, SB-743921 and GSK-923295. Cytokinetics is seeking a partner for *ispinesib*, SB-743921 and GSK-923295. All of these drug candidates and potential drug candidates have arisen from Cytokinetics’ research activities and are directed towards the cytoskeleton. The cytoskeleton is a complex biological infrastructure that plays a fundamental role within every human cell. Additional information about Cytokinetics can be obtained at 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 Act’s Safe Harbor for forward-looking statements. Examples of such statements include, but are not limited to, statements relating to Cytokinetics’ and its partners’ research and development activities, including the results from clinical and non-clinical studies of GSK-923295, the significance of such results, and the utility of such non-clinical results in identifying patient subpopulations that may be particularly responsive to GSK-923295; the reversion of rights for GSK-923295 to Cytokinetics; and the properties and potential benefits of GSK-923295 and Cytokinetics’ other drug candidates and potential drug candidates. Such statements are based on management’s current expectations, but actual results may differ materially due to various risks and uncertainties, including, but not limited to, potential difficulties or delays in the development, testing, regulatory approvals for trial commencement, progression or product sale or manufacturing, or production of Cytokinetics’ drug candidates that could slow or prevent clinical development or product approval, including risks that current and past results of clinical trials or preclinical studies may not be indicative of future clinical trials results, patient enrollment for or conduct of clinical trials may be difficult or delayed, Cytokinetics’ drug candidates may have adverse side effects or inadequate therapeutic efficacy, the U.S. Food and Drug Administration or foreign regulatory agencies may delay or limit Cytokinetics’ or its partners’ ability to conduct clinical trials, and Cytokinetics may be unable to obtain or maintain patent or trade secret protection for its intellectual property; Cytokinetics may incur unanticipated research and development and other costs or be unable to obtain additional financing necessary to conduct development of its products; Cytokinetics may be unable to enter into future collaboration agreements for its drug candidates and programs on acceptable terms, if at all; standards of care may change, rendering Cytokinetics’ drug candidates obsolete; others may introduce products or alternative therapies for the treatment of indications Cytokinetics’ drug candidates and potential drug candidates may target; and risks and uncertainties relating to the timing and receipt of payments from its partners, including milestones and

royalties on future potential product sales under Cytokinetics' collaboration agreements with such partners. 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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