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): August 31, 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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Item 8.01 Other Events.

On August 31, 2009, Cytokinetics, Incorporated issued a press release announcing that data from two Phase IIa clinical trials evaluating omecamtiv mecarbil (formerly CK-1827452), one in stable heart failure patients and one in patients with ischemic cardiomyopathy and angina, were presented at the European Society of Cardiology Congress 2009 in Barcelona, Spain. The company believes these data provide support for the further clinical development of this novel drug candidate as a potential treatment for heart failure. Amgen Inc. exercised an option to obtain an exclusive, world-wide (excluding Japan) license to omecamtiv mecarbil, subject to specified development and commercialization participation rights of Cytokinetics.

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 the Current Report on Form 8K:

Exhibit No. Description

99.1 Press Release, dated August 31, 2009.

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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

August 31, 2009

By: /s/ Sharon Barbari

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

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Exhibit Index

Exhibit No.	Description
99.1	Press release, dated August 31, 2009

Contact:

Christopher S. Keenan
Director, Investor & Media Relations
(650) 624-3000

CYTOKINETICS PRESENTS PHASE IIA CLINICAL TRIALS DATA RELATING TO *OMECAMTIV MECARBIL* AT THE EUROPEAN SOCIETY OF CARDIOLOGY CONGRESS 2009

Results Provide Support for Further Clinical Development of Novel Cardiac Muscle Myosin Activator for the Potential Treatment of Heart Failure

South San Francisco, CA, August 31, 2009 – Cytokinetics, Incorporated (Nasdaq: CYTK) announced today that data from two Phase IIa clinical trials evaluating *omecamtiv mecarbil* (formerly CK-1827452), one in stable heart failure patients and one in patients with ischemic cardiomyopathy and angina, were presented at the European Society of Cardiology Congress 2009 in Barcelona, Spain. The company believes these data provide support for the further clinical development of this novel drug candidate as a potential treatment for heart failure. Amgen Inc. exercised an option to obtain an exclusive, world-wide (excluding Japan) license to *omecamtiv mecarbil*, subject to specified development and commercialization participation rights of Cytokinetics.

"We believe the data from these Phase IIa clinical trials evaluating *omecamtiv mecarbil* in heart failure patients provide additional support for our therapeutic hypothesis for this drug candidate that warrants further evaluation as an important potential treatment option in this complex disease," stated Andrew A. Wolff, MD, FACC, Cytokinetics' Senior Vice President of Clinical Research and Development and Chief Medical Officer. "Now, together with our partner Amgen, we look forward to progressing into Phase IIb clinical trials and evaluating the impact of this novel mechanism on other clinical aspects of heart failure."

Poster Presentations

A poster titled, "Echocardiographic Detection of Increases in Ejection Fraction in Patients with Heart Failure Receiving the Selective Cardiac Myosin Activator, CK-1827452" was presented on Monday, August 31, 2009 by Andrew A. Wolff, MD, FACC, Senior Vice President of Clinical Research and Development and Chief Medical Officer, Cytokinetics, Inc., South San Francisco. This poster included three analyses of the effect of *omecamtiv mecarbil* on ejection fraction. In one analysis, ejection fraction was calculated from two ventricular volumes assessed by the traditional, image-based biplane Method of Discs; in two other analyses, ejection fraction was calculated by each of two different hybrid methods that use a measurement of stroke volume based on Doppler interrogation of the left ventricular outflow tract and a single assessment of ventricular volume by the Method of Discs. In all three analyses, ejection fraction increased with the plasma concentration of *omecamtiv mecarbil*; however, increases of greater magnitude were observed with the hybrid methods. Ejection fraction assessed by the hybrid methods correlated better with systolic ejection time than did ejection fraction assessed by the Method of Discs. Ejection fraction by the hybrid method based on left ventricular end-systolic volume was slightly better-correlated with systolic ejection time than the hybrid ejection fraction based on left ventricular end-diastolic volume.

A poster titled, "Phase II Safety Study Evaluating the Novel Cardiac Myosin Activator, CK-1827452, in Patients with Ischemic Cardiomyopathy and Angina" was presented on Monday, August 31, 2009 by Andrew A. Wolff, MD, FACC, Senior Vice President of Clinical Research and Development and Chief Medical Officer, Cytokinetics, Inc., South San Francisco. This poster presentation included data from a double-blind, randomized, placebo-controlled Phase IIa clinical trial evaluating the effect of *omecamtiv mecarbil* on symptom-limited exercise tolerance in heart failure patients with ischemic cardiomyopathy and angina, and included a detailed public disclosure of specific adverse events in the trial. Previously, at the 2009 Heart Failure Congress of the European Society of Cardiology, held in Nice, France, Barry H. Greenberg, MD, Chair of the Safety Review Committee for this clinical trial and Director, Advanced Heart Failure Treatment Program, University of California, San Diego Medical Center, presented a poster summarizing the data from this clinical trial. The primary safety endpoint of this clinical trial was stopping an exercise treadmill test, performed during double-blind therapy with *omecamtiv mecarbil* or placebo, due to angina at a stage earlier than the shorter of two baseline exercise treadmill tests. This endpoint occurred in one patient receiving placebo and in no patients receiving either the lower or higher of two dose levels of *omecamtiv mecarbil*. The authors concluded that in heart failure patients with ischemic cardiomyopathy and angina, who theoretically could be most vulnerable to the possible deleterious consequences of systolic ejection time prolongation, treatment with *omecamtiv mecarbil,* at doses producing plasma concentrations previously demonstrated in other trials to increase cardiac function, did not deleteriously affect a broad range of safety assessments in the setting of exercise. The authors concluded that the results of this trial, together with data from previous studies evaluating the pharmacodynamic effects of *omecamtiv mecarbil* in healthy volunteers and in stable heart failure patients, support further clinical assessments of *omecamtiv mecarbil* in patients with heart failure.

Development Status of *Omecamtiv Mecarbil* (formerly CK-1827452)

Omecamtiv mecarbil, a novel cardiac muscle myosin activator, has been the subject of a clinical trials program comprised of multiple Phase I and Phase IIa trials. This program was designed to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of both intravenous and oral formulations of *omecamtiv mecarbil* for the potential treatment of heart failure across the continuum of care, in both hospital and outpatient settings. Two Phase IIa clinical trials of *omecamtiv mecarbil* from this program have been completed, and a Phase IIa clinical trial of *omecamtiv mecarbil* is ongoing. In addition, Cytokinetics has conducted five Phase I clinical trials of *omecamtiv mecarbil* in healthy subjects: a first-time-in-humans study evaluating an intravenous formulation, an oral bioavailability study evaluating both intravenous and oral formulations, and three studies of oral formulations: a drug-drug interaction study, a dose proportionality study and a study evaluating modified-release formulations. Data from each of these trials have been reported previously.

Background on Cardiac Myosin Activators and Cardiac Contractility

Cardiac myosin is the cytoskeletal motor protein in the cardiac muscle cell that is directly responsible for converting chemical energy into the mechanical force resulting in cardiac contraction. Cardiac contractility is driven by the cardiac sarcomere, a highly ordered cytoskeletal structure composed of cardiac myosin, actin and a set of regulatory proteins, and is the fundamental unit of muscle contraction in the heart. The sarcomere represents one of the most thoroughly characterized protein machines in human biology. Current inotropic agents, such as beta-adrenergic receptor agonists or inhibitors of phosphodiesterase activity, increase cardiac cell contractility by increasing the concentration of intracellular calcium, which further activates the cardiac sarcomere. This effect on calcium levels, however, also has been linked to potentially life-threatening side effects. The inotropic mechanism of current drugs also increases the velocity of cardiac contraction and shortens systolic ejection time. In contrast, cardiac myosin activators have been shown to work in the absence of changes in intracellular calcium by a novel mechanism that directly stimulates the activity of the cardiac myosin motor protein. Cardiac myosin activators accelerate the rate-limiting step of the myosin enzymatic cycle and shift the enzymatic cycle in favor of the force-producing state. This inotropic mechanism results not in an increase in the velocity of cardiac contraction, but instead, in a lengthening of the systolic ejection time, which results in

increased cardiac contractility and cardiac function in a potentially more oxygen-efficient manner.

About Cytokinetics

Cytokinetics is a clinical-stage biopharmaceutical company focused on the discovery and development of novel small molecule therapeutics that modulate muscle function for the potential treatment of serious diseases and medical conditions. Cytokinetics' cardiac muscle contractility program is focused on cardiac muscle myosin, a motor protein essential to cardiac muscle contraction. Cytokinetics' lead compound from this program, *omecamtiv mecarbil* (formerly CK-1827452), a novel small molecule cardiac muscle myosin activator, is in Phase II clinical trials for the potential treatment of heart failure. In May 2009, Amgen Inc. exercised an option to obtain an exclusive worldwide (excluding Japan) license to develop and commercialize *omecamtiv mecarbil* and related compounds. Under the parties' collaboration agreement, Amgen has assumed responsibility for development and commercialization of *omecamtiv mecarbil* and related compounds, at its expense, subject to specified development and commercialization participation rights of Cytokinetics. In June 2009, Cytokinetics initiated a Phase I clinical trial of CK-2017357, a fast skeletal muscle troponin activator, in healthy volunteers in the United States. CK-2017357 is being developed as a potential treatment for diseases and medical conditions associated with aging, muscle wasting, and neuromuscular dysfunction. In January 2009, Cytokinetics announced the selection of a potential drug candidate directed towards smooth muscle contractility. Cytokinetics' smooth muscle myosin inhibitors have arisen from research focused towards potential treatments for diseases and conditions, such as systemic hypertension, pulmonary arterial hypertension or bronchoconstriction.

Cytokinetics' cancer development programs are focused on mitotic kinesins, a family of motor proteins essential to cell division. Cytokinetics is developing two drug candidates from this program, *ispinesib* and SB-743921, each an inhibitor of kinesin spindle protein. In addition, Cytokinetics and GlaxoSmithKline are collaborating on research and development activities focused on GSK-923295, an inhibitor of centromere-associated protein E (CENP-E).

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 programs, including the initiation, design, conduct and results of clinical trials relating to omecamtiv mecarbil and Cytokinetics' other drug candidates, including the initiation of Phase IIb clinical trials and the significance of clinical trial results for omecamtiv mecarbil; and the properties and potential benefits of omecamtiv mecarbil 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 omecamtiv mecarbil or Cytokinetics' other 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, omecamtiv mecarbil or Cytokinetics' other 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; Amgen's decisions with respect to the design, conduct, timing and continuation of development activities for omecamtiv mecarbil; GSK's decisions with respect to the design, conduct, timing and continuation of development activities for GSK-923295; Cytokinetics may incur unanticipated research and development and other costs or be unable to obtain additional financing necessary to conduct development of its products; standards of care may change rendering omecamtiv mecarbil and Cytokinetics' other 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 reimbursements, 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.###