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 27, 2008

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 27, 2008, Cytokinetics, Incorporated issued a press release announcing the completion of a protocol-defined interim analysis in an ongoing Phase IIa clinical trial evaluating the safety of CK-1827452 in patients with ischemic cardiomyopathy and angina. Based on the Safety Review Committee's review of safety data from the first cohort of patients, the Committee has recommended that the company open the second cohort of this clinical trial for enrollment. To date, no serious adverse events have been reported in this ongoing clinical trial. Cytokinetics also reiterated that it expects to conclude this trial by the end of 2008. CK-1827452, a novel cardiac myosin activator, is being developed for the potential treatment of patients with either acutely decompensated or chronic heart failure. CK-1827452 is the subject of a collaboration and option agreement between Cytokinetics and Amgen Inc.

A copy of the press release is being 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 of this Current Report on Form 8-K:

Exhibit No. Description

99.1 Press release, dated August 27, 2008.

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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 27, 2008

By: Sharon Barbari

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

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Exhibit Index

Exhibit No.	Description
99.1	Press release, dated August 27, 2008

Contacts:
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Director, Corporate Development
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Director, Investor Relations
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CYTOKINETICS ANNOUNCES COMPLETION OF INTERIM SAFETY ANALYSIS IN ONGOING PHASE IIA CLINICAL TRIAL OF CK-1827452

Safety Data from First Cohort Deemed Acceptable to Allow Progression to Second Cohort in Patients with Ischemic Cardiomyopathy and Angina

No Serious Adverse Events Observed

South San Francisco, CA, August 27, 2008 – Cytokinetics, Incorporated (Nasdaq: CYTK) announced the completion of a protocol-defined interim analysis in an ongoing Phase IIa clinical trial evaluating the safety of CK-1827452 in patients with ischemic cardiomyopathy and angina. Based on the Safety Review Committee's review of safety data from the first cohort of patients, the Committee has recommended that the company open the second cohort of this clinical trial for enrollment. To date, no serious adverse events have been reported in this ongoing clinical trial. Cytokinetics also reiterated that it expects to conclude this trial by the end of 2008. CK-1827452, a novel cardiac myosin activator, is being developed for the potential treatment of patients with either acutely decompensated or chronic heart failure. CK-1827452 is the subject of a collaboration and option agreement between Cytokinetics and Amgen Inc.

"Based on our careful review of safety data from this trial, I am comfortable recommending that the trial proceed to enroll patients in the second cohort, in which patients randomized to treatment with active CK-1827452 will receive a higher dose than in Cohort 1," stated Barry H. Greenberg, M.D., Chair of the Safety Review Committee for this clinical trial and Director, Advanced Heart Failure Treatment Program, University of California, San Diego Medical Center.

The company announced that 46 patients were enrolled and completed treatment in the first cohort of this trial and that, as per protocol, safety data from the first 31 of these patients were presented to the committee. No serious adverse events were reported for any patients in the first cohort and analyses of safety data from patients included in the interim analysis revealed no additional safety concerns.

"We look forward to sharing these data with the medical community at an appropriate scientific and medical forum and are now pleased to proceed forward with the next stage of this clinical trial," stated Andrew A. Wolff, M.D., F.A.C.C., Cytokinetics' Senior Vice President of Clinical Research and Development and Chief Medical Officer. "We believe these data, and data reported recently from other clinical trials, support the advancement of CK-1827452 in continuing trials."

Clinical Trial Design and Interim Safety Analysis

Preclinical studies have suggested that CK-1827452 increases ventricular performance in the absence of substantial changes in myocardial oxygen consumption, thereby increasing myocardial efficiency. Underlying the increases in ventricular performance is a lengthening of the systolic ejection time. At plasma concentrations that produce intolerable effects, the systolic ejection time is excessively prolonged, which limits diastolic coronary flow, leading to the dose limiting effect of myocardial ischemia. It is therefore desirable to investigate whether this dose-limiting effect of myocardial ischemia is exacerbated by exercise and the presence of coronary artery disease in patients with heart failure and angina.

This double-blind, randomized, placebo-controlled Phase IIa clinical trial is designed to evaluate both intravenous and oral formulations of CK-1827452 in patients with ischemic cardiomyopathy and angina. The primary objective of this trial is to assess the effect of intravenous CK-1827452 on symptom-limited treadmill exercise tolerance. The secondary objective of this trial is to assess the tolerability and resulting plasma concentrations of CK-1827452 administered as an oral formulation. The trial is designed to evaluate two cohorts of 45 patients each with ischemic cardiomyopathy and angina and an ejection fraction of less than or equal to 35 percent. Patients undergo two symptom-limited treadmill tests prior to randomization. Eligible patients in each cohort are then randomized to receive a two-hour double-blind intravenous loading dose of CK-1827452 (or placebo) followed by an eighteen hour double-blind intravenous infusion of CK-1827452 (or placebo). In each cohort, patients whose symptom-limited exercise tolerance during the infusion does not deteriorate relative to baseline receive either CK-1827452 or placebo administered orally for seven days, after which tolerability is assessed. CK-1827452 plasma levels are measured before and one hour after the final oral dose.

Patients in the first cohort were randomized in a 2-to-1 ratio either to CK-1827452 at a dose level intended to target a maximum plasma concentration of 295 ng/ml during the infusion period and 184 ng/ml during the oral dosing period or to placebo. Patients in the second cohort will be randomized in a 2-to-1 ratio either to CK-1827452 at a dose level intended to target a plasma concentration of 550 ng/ml during the infusion period and 368 ng/ml during the oral dosing period or to placebo. As specified by the trial protocol, before dosing could begin in Cohort 2, a Safety Review Committee (consisting of an independent Chair, and representatives from Cytokinetics and from the clinical research organization managing the trial) must review selected safety data described in an interim plan to determine whether there are evident safety issues that would preclude escalation of the intravenous and oral CK-1827452 dose regimens from Cohort 1 to Cohort 2 as planned. The committee is charged with a prospectively defined, statistical analysis of safety data from at least 30 patients in the first cohort, randomized 2:1 to CK-1827452 or placebo. The charter of the Safety Review Committee stipulates that in the event that there is not unanimity among the voting members of the Committee, the decisive vote is cast by the independent Chairperson, Dr. Greenberg.

Development Status of CK-1827452

CK-1827452 is currently the subject of a clinical trials program comprised of multiple Phase I and Phase IIa trials. This program is designed to evaluate the safety, tolerability, pharmacodynamics and pharmacokinetic profile of both intravenous and oral formulations of CK-1827452 in a diversity of patients for the potential treatment of heart failure across the continuum of care, in both hospital and outpatient settings.

In June 2008, at the at the Heart Failure Congress, the annual meeting of the Heart Failure Association of the European Society of Cardiology in Milan, Italy, Cytokinetics announced results from an interim analysis of its first and ongoing Phase IIa clinical trial of CK-1827452 in patients with stable heart failure. At the time of the analysis, 22 patients had been evaluated in this clinical trial. The safety data from this analysis suggested that CK-1827452 was well-tolerated with no serious adverse events reported in heart failure patients exposed to the intended range of doses and plasma concentrations. A pharmacodynamic-pharmacokinetic analysis of data from these 22 patients showed that when compared to placebo, CK-1827452 produced statistically significant and clinically relevant increases in Doppler-derived stroke volume and fractional shortening as a consequence of statistically significant prolongations of systolic ejection time. In this interim analysis, statistically significant correlations were observed between the increases in the three indices of cardiac ventricular function and increases in the plasma concentration of CK-1827452. Doppler-derived systolic ejection time and stroke volume measured during the second hour of infusion were the most sensitive indicators of effect. Changes in left ventricular ejection fraction, a measurement with high variability in

patients with ventricular disease, did not reach statistical significance in that dataset. Across the range of plasma concentrations evaluated, the pharmacokinetics of CK-1827452 were generally linear with respect to dose and similar to those observed in the healthy volunteers in the first-time-in-humans Phase I trial of CK-1827452. Heart rate declined slightly at higher concentrations and there were no dose-related changes in blood pressure in this interim analysis. Cytokinetics plans to present additional data from these same 22 patients at the European Society of Cardiology 2008 Congress in Munich, Germany and also plans to present interim data including additional patients who have completed treatment in this ongoing trial in as part of the Late Breaking Clinical Trials Session at the Annual Meeting of the Heart Failure Society of America in Toronto, Ontario, Canada.

In addition to these two ongoing Phase IIa clinical trials, in April 2008, Cytokinetics opened enrollment in an open-label, non-randomized Phase IIa clinical trial designed to evaluate an intravenous formulation of CK-1827452 administered to patients with stable heart failure undergoing clinically indicated coronary angiography in a cardiac catheterization laboratory. Cytokinetics has conducted five Phase I clinical trials of CK-1827452 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. Cytokinetics' cardiovascular program is focused towards the discovery and development of small molecule cardiac myosin activators in order to create next-generation treatments to manage acute and chronic heart failure. Cytokinetics' program is based on the hypothesis that activators of cardiac myosin may address certain mechanistic liabilities of existing positive inotropic agents by increasing cardiac contractility without increasing intracellular calcium. 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 contractility 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 output in a potentially more oxygen-efficient manner.

About Cytokinetics

Cytokinetics is a biopharmaceutical company focused on the discovery, development and commercialization of novel small molecule drugs that may address areas of significant unmet clinical needs. Cytokinetics' cardiovascular disease program is focused to cardiac myosin, a motor protein essential to cardiac muscle contraction. Cytokinetics' lead compound from this program, CK-1827452, a novel small molecule cardiac myosin activator, entered Phase II clinical trials for the treatment of heart failure in 2007. Under a strategic alliance established in 2006, Cytokinetics and Amgen Inc. are performing joint research focused on identifying and characterizing activators of cardiac myosin as back-up and follow-on potential drug candidates to CK-1827452. Amgen has obtained an option for an exclusive license to develop and commercialize CK-1827452, subject to Cytokinetics' development and commercial participation rights. Cytokinetics' cancer program is focused on mitotic kinesins, a family of motor proteins essential to cell division. Under a strategic alliance established in 2001, Cytokinetics and GlaxoSmithKline (GSK) are conducting research and development activities focused on the potential treatment of cancer. Cytokinetics is developing two novel drug candidates that have arisen from this program, *ispinesib* and SB-743921, each a novel inhibitor of kinesin spindle protein (KSP), a mitotic kinesin. Cytokinetics is sponsoring a Phase I/II clinical trial of *ispinesib* as monotherapy as a first-line treatment in chemotherapy-naïve patients with locally advanced or metastatic breast cancer. In addition, Cytokinetics is conducting a Phase I/II trial of SB-743921 in patients with non-Hodgkin or Hodgkin lymphomas. GSK has obtained an option for the joint development and commercialization of *ispinesib* and SB-743921. Cytokinetics and GSK are conducting collaborative research activities directed to the mitotic kinesin centromere-associated protein E (CENP-E). GSK-923295, a CENP-E inhibitor, is being developed under the strategic alliance by GSK; GSK began a Phase I clinical trial with GSK-923295 in 2007. In April 2008, Cytokinetics announced the selection of a potential drug candidate directed towards skeletal muscle contractility which may be developed as a potential treatment for skeletal muscle weakness associated with neuromuscular diseases or other conditions. 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 Safe Harbor for forward-looking statements contained in the Act. Examples of such statements include, but are not limited to, statements relating to Cytokinetics' and its partners' research and development programs, including the design, enrollment, conduct and results of clinical trials and planned presentations of clinical trial data relating to CK-1827452; and the properties and potential benefits of CK-1827452 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 approval or production of CK-1827452 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, including without limitation, due to political instability in countries where clinical trials of CK-182745 or Cytokinetics' other drug candidates are being conducted, CK-1827452 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; 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; 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.