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): February 21, 2012

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))

Top of the Form

Item 8.01 Other Events.

On February 21, 2012, Cytokinetics, Incorporated issued a press release announcing the initiation of a Phase I study designed to assess the safety, tolerability and pharmacokinetics of multiple oral formulations of omecamtiv mecarbil in healthy volunteers. This clinical trial is being conducted by Amgen in collaboration with Cytokinetics and will be used to guide selection of an oral formulation of omecamtiv mecarbil for later-stage clinical trials. Amgen holds an exclusive worldwide (excluding Japan) license to omecamtiv mecarbil and related compounds, subject to specified development and commercialization participation 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.

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

February 21, 2012

By: /s/ Sharon Barbari

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

Top of the Form

Exhibit Index

Exhibit No.	Description
99.1	Press Release, dated February 21, 2012

Contact:
Jodi Goldstein
Manager, Corporate Communications and Marketing
(650) 624-3000

CYTOKINETICS ANNOUNCES INITIATION OF PHASE I CLINICAL TRIAL OF ORAL FORMULATIONS OF *OMECAMTIV MECARBIL* IN HEALTHY VOLUNTEERS

South San Francisco, CA, February 21, 2012 — Cytokinetics, Incorporated (Nasdaq: CYTK) announced today the initiation of a Phase I study designed to assess the safety, tolerability and pharmacokinetics of multiple oral formulations of *omecamtiv mecarbil* in healthy volunteers. This clinical trial is being conducted by Amgen in collaboration with Cytokinetics and will be used to guide selection of an oral formulation of *omecamtiv mecarbil* for later-stage clinical trials. Amgen holds an exclusive worldwide (excluding Japan) license to *omecamtiv mecarbil* and related compounds, subject to specified development and commercialization participation of Cytokinetics.

This Phase I clinical trial is a randomized, open-label, 4-way cross-over study designed to determine the oral bioavailability of multiple formulations of *omecamtiv mecarbil* in healthy subjects. Approximately 60 subjects will be enrolled in this study. Each subject will receive two of the six oral formulations included in the study, each administered as a single dose under fasted and fed conditions. The primary objective of this study is to determine the effect of food on the bioavailability of *omecamtiv mecarbil* when administered in multiple oral formulations. The secondary objectives are to evaluate the bioavailability, safety, tolerability and pharmacokinetic profiles of *omecamtiv mecarbil* when administered in multiple oral formulations.

Development Status of *Omecamtiv Mecarbil*

An intravenous formulation of o*mecamtiv mecarbil*, a novel cardiac muscle myosin activator, is currently being evaluated in the ATOMIC-AHF (A Trial of Omecamtiv Mecarbil to Increase Contractility in Acute Heart Failure) clinical trial. This Phase IIb clinical trial is an international, multicenter, randomized, double-blind, placebo-controlled study in approximately 600 patients, enrolled in 3 sequential, ascending-dose cohorts. In each cohort, patients will be randomized to receive *omecamtiv mecarbil* or placebo. The primary objective of this trial is to evaluate the effect of 48 hours of intravenous (IV) *omecamtiv mecarbil* compared to placebo on dyspnea (shortness of breath) in patients with left ventricular systolic dysfunction hospitalized for acute heart failure. The secondary objectives are to assess the safety and tolerability of 3 dose levels of IV *omecamtiv mecarbil* compared with placebo and to evaluate the effects of 48 hours of treatment with IV *omecamtiv mecarbil* on additional measures of dyspnea, patients' global assessments, change in N-terminal pro brain-type natriuretic peptide (a biomarker associated with the severity of heart failure) and short-term clinical outcomes in these patients. In addition, the trial will evaluate the relationship between *omecamtiv mecarbil* plasma concentrations and echocardiographic parameters in patients with acute heart failure.

Prior to this Phase IIb clinical trial, *omecamtiv mecarbil* was the subject of a clinical trials program comprised of multiple Phase I and Phase IIa trials conducted under Cytokinetics' sponsorship. This program was designed to evaluate the safety, tolerability, pharmacodynamic and pharmacokinetic profiles 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. 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' lead drug candidate from its cardiac muscle contractility program, omecamtiv mecarbil, is in clinical development for the potential treatment of heart failure. Amgen Inc. holds an exclusive license worldwide (excluding Japan) to develop and commercialize omecamtiv 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 currently the subject of a Phase II clinical trials program and has been granted orphan-drug designation by the U.S. Food and Drug Administration for the potential treatment of amyotrophic lateral sclerosis, a debilitating disease of neuromuscular impairment in which CK-2017357 demonstrated potentially clinically relevant pharmacodynamic effects in a Phase IIa trial. Cytokinetics is also conducting research related to compounds that inhibit smooth muscle contractility and which may be useful as potential treatments for diseases and conditions associated with excessive smooth muscle contraction, such as bronchoconstriction associated with asthma and chronic obstructive pulmonary disorder (COPD). All of these compounds 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 Amgen's research and development activities, including the initiation, conduct, design, scope and results of omecamtiv mecarbil clinical trials, and the properties and potential benefits of omecamtiv mecarbil and Cytokinetics' other drug candidates and compounds. 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; Amgen's decisions with respect to the design, initiation, conduct, timing and continuation of development activities for omecamtiv mecarbil; Cytokinetics may incur unanticipated research and development and other costs or be unable to obtain additional financing necessary to conduct development of its products on acceptable terms, if at all; 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; competitive products or alternative therapies may be developed by others 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.