

---

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):

April 19, 2011

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 April 19, 2011, Cytokinetics, Incorporated issued a press release announcing that the opening to enrollment of a Phase IIb clinical trial of an intravenous formulation of omecamtiv mecarbil. This trial is being conducted by Amgen in collaboration with Cytokinetics and is designed to evaluate the safety and efficacy of omecamtiv mecarbil in patients with left ventricular systolic dysfunction who are hospitalized for acute heart failure. Amgen holds an exclusive, worldwide (excluding Japan) license to omecamtiv mecarbil and related compounds, 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.

---

[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.

April 19, 2011

Cytokinetics, Incorporated

By: /s/ 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 April 19, 2011

Contact:

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

## CYTOKINETICS ANNOUNCES OPENING OF PHASE IIB CLINICAL TRIAL OF INTRAVENOUS FORMULATION OF *OMECAMTIV MECARBIL* IN PATIENTS WITH ACUTE HEART FAILURE

**South San Francisco, CA, April 19, 2011** — Cytokinetics, Incorporated (Nasdaq: CYTK) announced today the opening to enrollment of a Phase IIB clinical trial of an intravenous formulation of *omecamtiv mecarbil*. This trial is being conducted by Amgen in collaboration with Cytokinetics and is designed to evaluate the safety and efficacy of *omecamtiv mecarbil* in patients with left ventricular systolic dysfunction who are hospitalized for acute heart failure. Amgen holds an exclusive, worldwide (excluding Japan) license to *omecamtiv mecarbil* and related compounds, subject to specified development and commercialization participation rights of Cytokinetics.

“We are pleased that this Phase IIB clinical trial of an intravenous formulation of *omecamtiv mecarbil* is now open to enrollment,” stated Andrew A. Wolff, MD, FACC, Cytokinetics’ Senior Vice President of Clinical Research and Development and Chief Medical Officer. “The objective of this trial is to determine if the increases in left ventricular systolic function observed in patients with stable heart failure treated with *omecamtiv mecarbil* in an earlier Phase IIa trial may translate into clinically beneficial outcomes in patients hospitalized for acute heart failure.”

### Phase IIB Clinical Trial of *Omeclamtiv Mecarbil*

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.

### Development Status of *Omeclamtiv Mecarbil*

Prior to this Phase IIB clinical trial, *omecamtiv mecarbil*, a novel cardiac muscle myosin activator, 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. Two Phase IIa clinical trials of *omecamtiv mecarbil* were conducted. In addition, five Phase I clinical trials of *omecamtiv mecarbil* were conducted 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.

### 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* (formerly CK-1827452), 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 IIa 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 and non-clinical development of 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). In addition, prior Cytokinetics’ research generated three anti-cancer drug candidates that have progressed into clinical development: *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](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 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 initiation, conduct, design, scope and results of omeclamtiv mecarbil clinical trials and the properties and potential benefits of omeclamtiv 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 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 omeclamtiv 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; 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.*