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): June 18, 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 June 18, 2009, Cytokinetics, Incorporated issued a press release announcing the initiation of its a first-time-in-humans, Phase I clinical trial of CK-2017357 in healthy male volunteers. CK-2017357 is a fast skeletal muscle troponin activator and is the lead drug candidate that has emerged from the company's skeletal sarcomere activator program. CK-2017357 selectively activates the troponin complex and increases its sensitivity to calcium, subsequently leading to an increase in skeletal muscle force. This mechanism of action has demonstrated encouraging pharmacological activity in preclinical models that may relate to the potential treatment of diseases associated with aging, muscle wasting, and neuromuscular dysfunction. 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 June 18, 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

June 18, 2009

By: /s/ Sharon Barbari

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

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Exhibit No.	Description
99.1	Press Release, dated June 18, 2009

Contact:

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

CYTOKINETICS ANNOUNCES THE INITIATION OF A FIRST-TIME-IN-HUMANS, PHASE I CLINICAL TRIAL OF CK-2017357

First Drug Candidate from Cytokinetics' Fast Skeletal Muscle Activator Program to Enter Clinical Trials

South San Francisco, CA, June 18, 2009 – Cytokinetics, Incorporated (Nasdaq:CYTK) announced today that the company has initiated a first-time-in-humans, Phase I clinical trial of CK-2017357 in healthy male volunteers. CK-2017357 is a fast skeletal muscle troponin activator and is the lead drug candidate that has emerged from the company's skeletal sarcomere activator program. CK-2017357 selectively activates the troponin complex and increases its sensitivity to calcium, subsequently leading to an increase in skeletal muscle force. This mechanism of action has demonstrated encouraging pharmacological activity in preclinical models that may relate to the potential treatment of diseases associated with aging, muscle wasting, and neuromuscular dysfunction.

This Phase I clinical trial is a double-blind, randomized, placebo-controlled, single ascending dose study designed to evaluate CK-2017357 in healthy male volunteers. Each volunteer will participate in two dosing sessions separated by an adequate washout period. Subjects will be randomized (3:1) at the start of each dosing period to receive active study drug or placebo. The primary objective of this clinical trial is to determine the safety, tolerability and maximum tolerated dose (MTD) of CK-2017357 administered orally. The secondary objective is to evaluate the pharmacokinetic profile of CK-2017357. Following determination of the MTD and the pharmacokinetic profile of CK-2017357, further evaluation of the drug candidate's pharmacodynamic effects on skeletal muscle function in healthy volunteers may be undertaken in a second stage of this clinical trial.

"This first-time-in-humans clinical trial of CK-2017357 builds on our expertise in the biology of muscle function, initially demonstrated with our cardiac muscle myosin activator program and now translated to our skeletal sarcomere activator program," stated Fady Malik, MD, PhD, Cytokinetics' Vice President, Biology and Therapeutics. "This novel drug candidate may represent an important approach to treating skeletal muscle weakness that is a consequence of a wide array of diseases associated with muscle wasting or primary neuromuscular dysfunction."

"The initiation of this Phase I clinical trial is further demonstration of Cytokinetics' expertise in building a portfolio of novel drug candidates that leverage our expertise in the cytoskeletal pharmacology and biology of muscle contractility," stated Robert I. Blum, Cytokinetics' President and CEO. "This drug candidate, along with others we are developing, illustrates the productivity of our research and development teams that have now generated five next-generation drug candidates, which may address significant unmet needs across multiple therapeutic indications."

Background on Skeletal Muscle Activators

Skeletal muscle contractility is driven by the sarcomere, the fundamental unit of skeletal muscle contraction. It is a highly ordered cytoskeletal structure composed of several key proteins. The first, skeletal muscle myosin, is the cytoskeletal motor protein that converts chemical energy into mechanical force through its interaction with a second protein, actin. A set of regulatory proteins, which includes tropomyosin and several types of troponin, make the actin-myosin interaction dependent on changes in intracellular calcium levels. Cytokinetics' skeletal muscle contractility program is focused to the discovery and development of small molecule skeletal sarcomere activators and leverages Cytokinetics' expertise gained from its ongoing discovery and development of cardiac sarcomere activators, including the cardiac myosin activator, CK-1827452, now in Phase II clinical development as a potential treatment for heart failure. In non-clinical models, skeletal sarcomere activators have demonstrated pharmacological activity that may lead to new therapeutic options for diseases associated with aging, muscle wasting, and neuromuscular dysfunction. The clinical effects of muscle wasting, fatigue and loss of mobility can range from decreased quality of life to, in some instances, life-threatening complications. By directly improving skeletal muscle function, a small molecule activator of the skeletal sarcomere may potentially enhance physical performance and quality of life in patients with conditions marked by muscle weakness, including neuromuscular diseases such as amyotrophic lateral sclerosis (ALS), myasthenia gravis, cachexia, sarcopenia and the general frailty associated with aging.

Market Potential for Skeletal Muscle Activators

The conditions that could benefit from a skeletal muscle activator are grievous and severe. ALS, which afflicts between 20,000 and 30,000 people in the United States and is associated with a 3-year mortality rate of 50%. In addition, few options exist for the treatment of other neuromuscular disorders, such as myasthenia gravis, a chronic disease characterized by a defect in the transmission of nerve impulses to skeletal muscles, which afflicts approximately 60,000 patients in the United States. Patients with disorders and conditions with a higher prevalence could also benefit from enhanced skeletal muscle functional performance, including patients with cachexia, intermittent claudication and sarcopenia. Cachexia, a syndrome characterized by a drastic and unintentional loss of body mass, is estimated to be prevalent in 15%-35% of heart failure patients and in approximately 50% of cancer patients. Intermittent claudication, which usually refers to cramping pains in the legs caused by peripheral arterial disease, is a condition that impacts between 1 million and 3 million people in the United States each year. Sarcopenia, which is an age-related loss of muscle mass, strength, and function, is estimated to impact the lives of over 25-30% of the U.S. population over the age of 65 and can result in additional injuries and medical conditions due to limited mobility.

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, CK-1827452, a novel small molecule cardiac muscle myosin activator, is in Phase II clinical trials for the potential treatment of heart failure. Amgen Inc. has exercised an option for an exclusive license to develop and commercialize CK-1827452 world-wide (excluding Japan), subject to Cytokinetics' development and commercialization participation rights. In mid-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 Safe Harbor for forward-looking statements contained in the Act. Examples of such statements include, but are not limited to, statements relating to the scope, design and conduct of Cytokinetics' and its partners' research and development programs; the potential benefits of Cytokinetics' drug candidates and potential drug candidates, including the benefits of skeletal muscle activators; and the market potential for skeletal muscle activators. 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 Cytokinetics' drug candidates and the significance of such results; and the properties and potential benefits of Cytokinetics' 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, including without limitation, due to political instability in countries where clinical trials of Cytokinetics' drug candidates are being conducted, 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 and GSK's decisions with respect to the design, conduct, timing and continuation of development activities for CK-1827452 and GSK-923295, respectively; 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 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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