Amgen And Cytokinetics Announce The First Presentation Of Data From Phase 2 ATOMIC-AHF Study Of Omecamtiv Mecarbil

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First Trial to Evaluate Cardiac Myosin Activator in Patients with Acute Heart Failure Presented at ESC Congress 2013

THOUSAND OAKS, Calif. and SOUTH SAN FRANCISCO, Calif., Sept. 3, 2013 /PRNewswire/ -- Amgen (NASDAQ: AMGN) and Cytokinetics Incorporated (NASDAQ: CYTK) today announced the first presentation of data from the ATOMIC-AHF (Acute Treatment with *Omecamtiv Mecarbil* to Increase Contractility in Acute Heart Failure) study at the ESC Congress 2013, organized by the European Society of Cardiology, in Amsterdam. ATOMIC-AHF was a randomized, double-blind, placebo-controlled Phase 2 study that enrolled 613 patients hospitalized with acute heart failure (AHF) treated for 48 hours with *omecamtiv mecarbil* or placebo and designed to evaluate the safety, pharmacokinetics, pharmacodynamics, and potential efficacy of an intravenous formulation of *omecamtiv mecarbil* in patients with AHF. The study did not meet its primary endpoint of dyspnea (shortness of breath) response as measured by the 7-point Likert scale through 48 hours (p=0.33) but showed favorable dose and concentration-related trends on dyspnea response.

ATOMIC-AHF enrolled three, sequential, dose escalation cohorts of patients treated for 48 hours with *omecamtiv mecarbil* or placebo. The primary efficacy endpoint in ATOMIC-AHF was dyspnea symptom response. Secondary endpoints included other clinical and pharmacodynamic (echocardiographic) effects including death or worsening heart failure within seven days. The *omecamtiv mecarbil* treatment groups were not statistically different in their 7-point Likert scale dyspnea symptom response rates compared to the pooled placebo group (p=0.33); therefore, the primary endpoint was not met. *Omecamtiv mecarbil* demonstrated favorable dose- and concentration-related trends (nominal p=0.025 and nominal p=0.007, respectively) on dyspnea response. Improvement in dyspnea was observed in the highest *omecamtiv mecarbil* dose group when compared against its paired placebo group in the third cohort (dyspnea symptom response in 51 percent of subjects on *omecamtiv mecarbil* versus 37 percent on placebo, nominal p=0.03). The incidence of worsening heart failure within seven days of initiating treatment was 17 percent in the pooled placebo group and was 13 percent, 8 percent and 9 percent on *omecamtiv mecarbil* in the first, second and third cohorts, respectively. Systolic ejection time, the echocardiographic signature of *omecamtiv mecarbil*, increased in a concentration-dependent manner.

Rates of adverse events (AEs), serious AEs, adjudicated deaths and hospitalizations were similar between *omecamtiv mecarbil* and placebo groups. There were seven post-randomization myocardial infarctions in the *omecamtiv mecarbil* treated groups compared with three in the placebo groups (2.3 percent vs. 1.0 percent, respectively). However, there was no relationship between the maximum increase from the baseline troponin (a biomarker specific for cardiac muscle damage) and increasing plasma concentrations of *omecamtiv mecarbil*. *Omecamtiv mecarbil* was not associated with an increased incidence of tachyarrhythmias nor were heart rate or blood pressure adversely affected.

"Although ATOMIC-AHF did not achieve its primary efficacy endpoint, we are encouraged by the data from this study," said Sean E. Harper, M.D., executive vice president of Research and Development at Amgen. "*Omecamtiv mecarbil* is a unique investigational therapy for patients with acute and chronic heart failure. We look forward to the data from the COSMIC-HF study, which together with the data from ATOMIC-AHF will inform our decision on whether to progress *omecamtiv mecarbil* into Phase 3 clinical trials."

"We are pleased with the results from ATOMIC-AHF," stated Robert I. Blum, President and CEO at Cytokinetics. "This novel mechanism drug candidate has consistently been associated with dose-related and plasma concentration-related pharmacodynamic and other effects in a robust program of Phase 1 and Phase 2 clinical trials. We look forward to results from COSMIC-HF and the potential progression of *omecamtiv mecarbil* in development."

ATOMIC-AHF and COSMIC-HF

ATOMIC-AHF is a completed Phase 2 clinical trial designed to evaluate an intravenous formulation of *omecamtiv mecarbil* in 613 patients enrolled in three sequential, ascending-dose cohorts. In each cohort, patients were randomized 1:1 to *omecamtiv mecarbil* or placebo. The primary objective of this trial was to evaluate the effect of 48 hours of intravenous *omecamtiv mecarbil* compared to placebo on dyspnea in patients with left ventricular systolic dysfunction hospitalized for acute heart failure. The secondary objectives were to assess the safety and tolerability of the three dose levels of *omecamtiv mecarbil* compared with placebo and to evaluate the effects of 48 hours of treatment with intravenous *omecamtiv mecarbil* on additional clinical and pharmacodynamic measures.

Oral formulations of *omecamtiv mecarbil* are currently being evaluated in a Phase 2 trial known as COSMIC-HF (Chronic Oral Study of Myosin Activation to Increase Contractility in Heart Failure). COSMIC-HF is a double-blind, randomized, placebo-controlled, multicenter, dose escalation study designed to evaluate the safety and efficacy of *omecamtiv mecarbil* in approximately 420 patients with chronic heart failure and left ventricular systolic dysfunction.

ATOMIC-AHF and COSMIC-HF are clinical trials of *omecamtiv mecarbil* conducted by Amgen in collaboration with Cytokinetics. Amgen holds an exclusive, worldwide license to develop and commercialize *omecamtiv mecarbil* and related compounds, subject to Cytokinetics' specified development and commercialization participation rights.

Additional information about clinical trials of *omecamtiv mecarbil* can be found at www.clinicaltrials.gov.

About *Omecamtiv Mecarbil*

Omecamtiv mecarbil is a novel cardiac myosin activator and is the subject of a collaboration between Cytokinetics and Amgen. 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 myosin activators are thought to accelerate the rate-limiting step of the myosin enzymatic cycle and shift the enzymatic cycle in favor of the force-producing state. Preclinical research has shown that cardiac myosin activators increase contractility in the absence of changes in intracellular calcium in cardiac myocytes.

About Amgen

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and

delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its biologics manufacturing expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be the world's largest independent biotechnology company, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

For more information, visit www.amgen.com and follow us on www.twitter.com/amgen.

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 Phase II clinical development for the potential treatment of heart failure. Amgen Inc. holds an exclusive license worldwide to develop and commercialize *omecamtiv mecarbil* and related compounds, subject to Cytokinetics' specified development and commercialization participation rights.

Cytokinetics is independently developing *tirasemtiv*, a fast skeletal muscle activator, as a potential treatment for diseases and medical conditions associated with neuromuscular dysfunction. Cytokinetics is collaborating with Astellas Pharma Inc. to develop CK-2127107, a skeletal muscle activator structurally distinct from *tirasemtiv*, for non-neuromuscular indications. All of these drug candidates have arisen from Cytokinetics' muscle biology focused 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

Amgen Forward-Looking Statements
This news release contains forward-looking statements that are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions that could cause actual results to differ materially from those described. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including estimates of revenues, operating margins, capital expenditures, cash, other financial metrics, expected legal, arbitration, political, regulatory or clinical results or practices, customer and prescriber patterns or practices, reimbursement activities and outcomes and other such estimates and results. Forward-looking statements involve significant risks and uncertainties, including those discussed below and more fully described in the Securities and Exchange Commission (SEC) reports filed by Amgen, including Amgen's most recent annual report on Form 10-K and any subsequent periodic reports on Form 10-Q and Form 8-K. Please refer to Amgen's most recent Forms 10-K, 10-Q and 8-K for additional information on the uncertainties and risk factors related to our business. Unless otherwise noted, Amgen is providing this information as of Sept. 2, 2013, and expressly disclaims any duty to update information contained in this news release.

No forward-looking statement can be guaranteed and actual results may differ materially from those we project. Discovery or identification of new product candidates or development of new indications for existing products cannot be guaranteed and movement from concept to product is uncertain; consequently, there can be no guarantee that any particular product candidate or development of a new indication for an existing product will be successful and become a commercial product. Further, preclinical results do not guarantee safe and effective performance of product candidates in humans. The complexity of the human body cannot be perfectly, or sometimes, even adequately modeled by computer or cell culture systems or animal models. The length of time that it takes for us to complete clinical trials and obtain regulatory approval for product marketing has in the past varied and we expect similar variability in the future. We develop product candidates internally and through licensing collaborations, partnerships and joint ventures. Product candidates that are derived from relationships may be subject to disputes between the parties or may prove to be not as effective or as safe as we may have believed at the time of entering into such relationship. Also, we or others could identify safety, side effects or manufacturing problems with our products after they are on the market. Our business may be impacted by government investigations, litigation and products liability claims. We depend on third parties for a significant portion of our manufacturing capacity for the supply of certain of our current and future products and limits on supply may constrain sales of certain of our current products and product candidate development.

In addition, sales of our products are affected by the reimbursement policies imposed by third-party payors, including governments, private insurance plans and managed care providers and may be affected by regulatory, clinical and guideline developments and domestic and international trends toward managed care and healthcare cost containment as well as U.S. legislation affecting pharmaceutical pricing and reimbursement. Government and others' regulations and reimbursement policies may affect the development, usage and pricing of our products. In addition, we compete with other companies with respect to some of our marketed products as well as for the discovery and development of new products. We believe that some of our newer products, product candidates or new indications for existing products, may face competition when and as they are approved and marketed. Our products may compete against products that have lower prices, established reimbursement, superior performance, are easier to administer, or that are otherwise competitive with our products. In addition, while we routinely obtain patents for our products and technology, the protection offered by our patents and patent applications may be challenged, invalidated or circumvented by our competitors and there can be no guarantee of our ability to obtain or maintain patent protection for our products or product candidates. We cannot guarantee that we will be able to produce commercially successful products or maintain the commercial success of our existing products. Our stock price may be affected by actual or perceived market opportunity, competitive position, and success or failure of our products or product candidates. Further, the discovery of significant problems with a product similar to one of our products that implicate an entire class of products could have a material adverse effect on sales of the affected products and on our business and results of operations.

The scientific information discussed in this news release related to our product candidates is preliminary and investigative. Such product candidates are not approved by the U.S. Food and Drug Administration (FDA), and no conclusions can or should be drawn regarding the safety or effectiveness of the product candidates.

Cytokinetics Forward Looking Statements
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 conduct and design of clinical trials; the significance and utility of clinical trial results; and the properties and potential benefits of *omecamtiv mecarbil* and Cytokinetics' other 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: Cytokinetics anticipates that it will be required to conduct at least one confirmatory Phase III clinical trial of *tirasemtiv* in ALS patients which will require significant additional funding, and it may be unable to obtain such additional funding on acceptable terms, if at all; 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 and Astellas' decisions with respect to the design, initiation, conduct, timing and continuation of development activities for *omecamtiv mecarbil* and CK-2127107, 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; 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.

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