



Cytokinetics and Astellas Announce Option Right for Tirasemtiv and Expansion of Global Collaboration for CK-2127107 in ALS

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Cytokinetics to Receive \$65 Million in Upfront Payments and \$30 Million in Additional Sponsored R&D; Potential for More than \$100 Million in Payments Associated with the Exercise of the Option

SOUTH SAN FRANCISCO, Calif. and TOKYO, July 27, 2016 (GLOBE NEWSWIRE) -- Cytokinetics, Inc. (Nasdaq:CYTK) ("Cytokinetics") and Astellas Pharma Inc. (TSE:4503) ("Astellas") today announced that Cytokinetics and Astellas have expanded their collaboration in skeletal muscle activators to include amyotrophic lateral sclerosis (ALS). Through this expansion, Cytokinetics has granted Astellas an option right for the development and commercialization of *tirasemtiv*, an investigational skeletal muscle activator. The companies have also agreed to amend their collaboration agreement to enable the development of CK-2127107 for the potential treatment of ALS and to extend their joint research focused on the discovery of additional next-generation skeletal muscle activators through 2017.

"We are pleased to further expand our productive and successful collaboration with Astellas in the area of skeletal muscle activators and to align our interests with regard to *tirasemtiv* and ALS," said Robert I. Blum, Cytokinetics' President and Chief Executive Officer. "Advancing *tirasemtiv* and CK-2127107 for the potential treatment of ALS reinforces our shared commitment to deliver on the promise of fast skeletal troponin activation for people living with ALS who are fighting this dreadful disease."

"The expansion of our collaboration illustrates Astellas' commitment to muscle disease as an important and focused therapeutic area for research as announced in our strategic plan," said Yoshihiko Hatanaka, Astellas' President and Chief Executive Officer. "ALS is a disease with significant unmet needs worldwide, and we are excited to expand our collaboration with Cytokinetics to include promising drug candidates in ALS which reflect our shared interests in muscle biology."

Option on *Tirasemtiv* and Expanded Collaboration Agreement

Upon execution of the amended agreement, Cytokinetics will receive \$65 million in committed capital from Astellas which includes upfront payments for Astellas' option right exercisable for *tirasemtiv* and amended terms of the companies' collaboration agreement to include ALS for CK-2127107.

Astellas' decision regarding its option for *tirasemtiv* will depend on its review of results from VITALITY-ALS and potentially other considerations by Astellas including the registration and marketing authorization of *tirasemtiv* in the United States and Europe. If Astellas exercises its option, the parties will enter into a global partnership in which Cytokinetics will continue to develop and commercialize *tirasemtiv* in North America, Europe, and other select countries, and Astellas will develop and commercialize *tirasemtiv* in other countries. Cytokinetics may receive over \$100 million in payments associated with the exercise of the option plus additional milestone payments and escalating double-digit royalties on Astellas' sales of *tirasemtiv* in its territory. Astellas may be eligible to receive royalties that can reach double-digits on Cytokinetics' sales of *tirasemtiv* in its territory.

Under this amendment of the collaboration agreement, Cytokinetics and Astellas have also agreed on a development plan for CK-2127107 in ALS. Cytokinetics will receive approximately \$30 million in additional sponsored research and development funding through 2017 which includes Astellas' sponsorship of Cytokinetics' conduct of the Phase 2 clinical development of CK-2127107 in ALS as well as the continuing research collaboration. Afterwards, Astellas and Cytokinetics will collaborate in the design and conduct of a potential registration program for CK-2127107 in ALS and the companies will share associated development costs. Cytokinetics would be eligible for additional milestone payments and royalties on sales based on the further development and commercialization of CK-2127107 for ALS.

The effectiveness of the amended agreement is subject to clearance under the Hart-Scott-Rodino Antitrust Improvements Act.

Cytokinetics Conference Call / Webcast

Cytokinetics will host a conference call on July 27, 2016 at 8:30 a.m. Eastern Time. The conference call will be simultaneously webcast and will be accessible in the Investors & Media section of Cytokinetics' Web site; for further information please go to www.cytokinetics.com. The live audio of the conference call is also accessible via telephone to investors, members of the news media and the general public by dialing either (866) 999-2985 (CYTK) (United States and Canada) or (706) 679-3078 (International) and typing in the passcode 55539648. An archived replay of the webcast will be available via Cytokinetics' website until August 3, 2016. The replay will also be available via telephone from July 27, 2016 at 11:30 a.m. Eastern Time until August 3, 2016 by dialing (855) 859-2056 (United States and Canada) or (404) 537-3406 (International) and typing in the passcode 55539648.

About Cytokinetics and Astellas Collaboration

In 2013, Astellas and Cytokinetics formed a partnership focused on the research, development, and commercialization of skeletal muscle activators. The primary objective of the collaboration is to advance novel therapies for diseases and medical conditions associated with muscle impairment and weakness. Under the collaboration, Cytokinetics exclusively licensed to Astellas rights to co-develop and potentially co-commercialize CK-2127107, a fast skeletal troponin activator, in non-neuromuscular indications.

In 2014, Astellas and Cytokinetics agreed to expand the collaboration to include certain neuromuscular indications, including spinal muscular atrophy (SMA), and to advance CK-2127107 into Phase 2 clinical development, initially in SMA. In connection with the expanded collaboration, the companies also agreed to extend their joint research program through 2016.

Under the recently amended collaboration, Astellas has exclusive rights to co-develop and commercialize CK-2127107 and other fast skeletal troponin activators in non-neuromuscular indications and certain neuromuscular indications (including SMA and ALS) and other novel mechanism skeletal muscle activators in all indications, subject to certain Cytokinetics' development and commercialization rights; Cytokinetics may co-promote and conduct certain commercial activities in North America and Europe under agreed scenarios.

About *Tirasemtiv* and CK-2127107

Tirasemtiv and CK-2127107 have demonstrated pharmacological activity that may lead to new therapeutic options for diseases associated with muscle weakness and fatigue. *Tirasemtiv* is a novel skeletal muscle activator that selectively activates the fast skeletal muscle troponin complex by increasing its sensitivity to calcium and, in preclinical studies and early clinical trials, demonstrated increases in skeletal muscle force in response to neuronal input and delays in the onset and reductions in the degree of muscle fatigue. *Tirasemtiv* has been studied in clinical trials that have enrolled over 1000 people internationally. *Tirasemtiv* is the subject of VITALITY-ALS, an ongoing Phase 3 clinical trial designed to confirm and extend findings on measures of respiratory function and muscle strength from prior studies. CK-2127107, a next-generation skeletal muscle activator has been the subject of five Phase 1 clinical trials in healthy volunteers, which evaluated safety, tolerability, bioavailability, pharmacokinetics and pharmacodynamics. CK-2127107 is being studied in Phase 2 studies in patients with SMA and chronic obstructive pulmonary disease (COPD).

About ALS

Amyotrophic lateral sclerosis (ALS) is a progressive degenerative neuromuscular disease that afflicts approximately 30,000 people in the United States and a comparable number of patients in Europe^[1]. Approximately 6,000 new cases of ALS are diagnosed each year in the United States^[2]. In people living with ALS, motor neurons progressively die and the brain can no longer communicate with the muscles through the spinal cord. As muscles are used less and less frequently, they can atrophy, causing people with ALS to lose the ability to perform everyday activities, such as walking, speaking, and eating. The average life expectancy of an ALS patient is approximately three to five years after diagnosis and only 10% of patients survive for more than 10 years. Death is usually due to respiratory failure because of diminished strength in the skeletal muscles responsible for breathing. Few treatment options exist for these patients, resulting in a high unmet need for new therapies to address functional deficits and disease progression.

About Cytokinetics

Cytokinetics is a late-stage biopharmaceutical company focused on discovering, developing and commercializing first-in-class muscle activators as potential treatments for debilitating diseases in which muscle performance is compromised and/or declining. As a leader in muscle biology and the mechanics of muscle performance, the company is developing small molecule drug candidates specifically engineered to increase muscle function and contractility. Cytokinetics' lead drug candidate is *tirasemtiv*, a fast skeletal muscle troponin activator, for the potential treatment of ALS. *Tirasemtiv* has been granted orphan drug designation and fast track status by the U.S. Food and Drug Administration and orphan medicinal product designation by the European Medicines Agency for the potential treatment of ALS. Cytokinetics retains the right to develop and commercialize *tirasemtiv*, subject to Astellas' option. Cytokinetics is collaborating with Amgen Inc. to develop *omecamtiv mecarbil*, a novel cardiac muscle activator, for the potential treatment of heart failure. Cytokinetics is collaborating with Astellas Pharma Inc. to develop CK-2127107, a fast skeletal muscle activator, for the potential treatment of spinal muscular atrophy, chronic obstructive pulmonary disease and ALS. Amgen holds an exclusive license worldwide to develop and commercialize *omecamtiv mecarbil* and Astellas holds an exclusive license worldwide to develop and commercialize CK-2127107. Both licenses are subject to Cytokinetics' specified development and commercialization participation rights. For additional information about Cytokinetics, visit <http://www.cytokinetics.com/>.

About Astellas Pharma Inc.

Astellas Pharma Inc., based in Tokyo, Japan, is a company dedicated to improving the health of people around the world through the provision of innovative and reliable pharmaceutical products. We focus on Urology, Oncology, Immunology, Nephrology and Neuroscience as prioritized therapeutic areas while advancing new therapeutic areas and discovery research leveraging new technologies/modalities. We are also creating new value by combining internal capabilities and external expertise in the medical/healthcare business. Astellas is on the forefront of healthcare change to turn innovative science into value for patients. For more information, please visit our website at www.astellas.com.

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 its partners' research and development activities, including the conduct, design, enrollment and progress of the Phase 2 clinical trial of CK-2127107 in patients with SMA, COPD and ALS and the VITALITY-ALS Phase 3 clinical trial of *tirasemtiv* in patients with ALS; the significance and utility of preclinical study and clinical trial results; and the properties and potential efficacy and safety profile of CK-2127107, *tirasemtiv* 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, further clinical development of *tirasemtiv* in ALS patients will require significant additional funding, and Cytokinetics may be unable to obtain such additional funding on acceptable terms, if at all; the FDA and/or other regulatory authorities may not accept effects on slow vital capacity as a clinical endpoint to support registration of *tirasemtiv* for the treatment of ALS; 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 trial 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; Astellas' decisions with respect to the design, initiation, conduct, timing and continuation of development activities for CK-2127107 and *tirasemtiv*, including Astellas' decisions with respect to its option to enter into a global collaboration for the development and commercialization of *tirasemtiv*; 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; 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.

Astellas Forward-Looking Statements

This press release includes forward-looking statements based on assumptions and beliefs in light of the information currently available to management and subject to significant risks and uncertainties. Forward-looking statements include all statements other than statements of historical fact, including plans, strategies and expectations for the future. Statements made in the future tense, and words such as "anticipate," "expect," "project," "continue," "believe," "plan," "estimate," "pro forma," "intend," "potential," "target," "forecast," "guidance," "outlook," "seek," "assume," "will," "may," "should," and similar expressions are intended to qualify as forward-looking statements. Forward-looking statements are based on estimates and assumptions made by management that are believed to be reasonable, though they are inherently uncertain and difficult to predict. Investors and security holders are cautioned not to place undue reliance on these forward-looking statements.

Actual results may differ materially depending on a number of factors. This press release contains information on pharmaceuticals (including compounds under development), but this information is not intended to make any representations or advertisements regarding the efficacy or

effectiveness of these pharmaceuticals nor provide medical advice of any kind.

[1] Amyotrophic Lateral Sclerosis Association . (2016). Media Facts and Key Facts. Retrieved from: <http://www.alsa.org/news/media/quick-facts.html> and <http://www.alsa.org/about-als/facts-you-should-know.html>

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