



## Cytokinetics Granted Orphan Drug Designation for Reldesemtiv for the Treatment of Amyotrophic Lateral Sclerosis

December 18, 2019 12:30 PM EST

SOUTH SAN FRANCISCO, Calif., Dec. 18, 2019 (GLOBE NEWSWIRE) -- Cytokinetics, Incorporated (Nasdaq: CYTK) today announced that the U.S. Food and Drug Administration (FDA) has granted orphan drug designation to *reldesemtiv* for the treatment of amyotrophic lateral sclerosis (ALS). Previously *reldesemtiv* was granted orphan drug designation for the treatment of spinal muscular atrophy (SMA) by the FDA and by the European Medicines Agency. In collaboration with Astellas, Cytokinetics is developing *reldesemtiv*, a fast skeletal muscle troponin activator (FSTA), as a potential treatment for people with ALS, SMA and certain other debilitating diseases and conditions associated with skeletal muscle weakness and/or fatigue.

The FDA, through its Office of Orphan Products Development (OOPD), grants orphan status to drugs and biologic products that are intended for the safe and effective treatment, diagnosis, or prevention of rare diseases or disorders that affect fewer than 200,000 people in the United States. Orphan drug designation provides a drug developer with certain benefits and incentives, including a seven-year period of U.S. marketing exclusivity from the date of marketing authorization, waiver of FDA user fees, and tax credits for clinical research.

"We're pleased that *reldesemtiv* received orphan designation from the FDA," said Fady I. Malik, M.D., Ph.D., Cytokinetics' Executive Vice President of Research & Development. "It's an exciting time for the development of investigational medicines for ALS. We believe treatment with *reldesemtiv* may represent a complementary approach to other potential therapies by directly addressing impaired muscle function and weakness that affects patients with ALS."

### About Reldesemtiv

Skeletal muscle contractility is driven by the sarcomere, the fundamental unit of skeletal muscle contraction and a highly ordered cytoskeletal structure composed of several key proteins. Skeletal muscle myosin is the motor protein that converts chemical energy into mechanical force through its interaction with 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. *Reldesemtiv*, a next-generation FSTA arising from Cytokinetics' skeletal muscle contractility program, slows the rate of calcium release from the regulatory troponin complex of fast skeletal muscle fibers, which sensitizes the sarcomere to calcium, leading to an increase in skeletal muscle contractility. *Reldesemtiv* has demonstrated pharmacological activity that may lead to new therapeutic options for diseases associated with skeletal muscle weakness and fatigue.

FORTITUDE-ALS, the Phase 2 clinical trial of *reldesemtiv* in patients with ALS, showed that the trial did not achieve statistical significance for a pre-specified dose-response relationship in the primary endpoint of change from baseline in slow vital capacity (SVC) after 12 weeks of dosing ( $p=0.11$ ). However, patients on all dose groups of *reldesemtiv* declined numerically less than patients on placebo for SVC and ALS Functional Rating Scale-Revised (ALSFRRS-R), with larger differences emerging over time.

### About ALS

Amyotrophic lateral sclerosis (ALS) is a progressive neurodegenerative disease that afflicts approximately 20,000 people in the United States and a comparable number of patients in Europe. Approximately 5,000 new cases of ALS are diagnosed each year in the United States. The average life expectancy of an ALS patient is approximately three to five years after diagnosis and only approximately 10 percent 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 and Astellas Collaboration

In 2013, Cytokinetics and Astellas formed a partnership focused on the research, development, and potential 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. Cytokinetics initially exclusively licensed to Astellas rights to co-develop and potentially co-commercialize *reldesemtiv* and other FSTAs in non-neuromuscular indications and to develop and commercialize other novel mechanism, skeletal muscle activators in all indications. Under the agreement as subsequently expanded and amended, Astellas also has exclusive rights to co-develop and commercialize *reldesemtiv* and other FSTAs in certain neuromuscular indications (including SMA and ALS). Cytokinetics has certain development and commercialization rights, including the right to co-promote FSTAs for neuromuscular indications in the U.S., Canada and Europe and to co-promote the other collaboration products in the U.S. and Canada. In November 2019, Cytokinetics and Astellas agreed in principle to revise the terms of the collaboration with respect to *reldesemtiv* whereby Cytokinetics would obtain exclusive control of the product and Astellas, for reduced collaboration funding and the provision of certain support, would obtain low- to mid-single future royalties on *reldesemtiv* in certain markets. Until the companies finalize revisions, the collaboration remains in effect in accordance with its current terms, the agreement in principle remains non-binding, and there can be no assurance Cytokinetics will enter into definitive agreements with Astellas regarding any revised terms.

### About Cytokinetics

Cytokinetics is a late-stage biopharmaceutical company focused on discovering, developing and commercializing first-in-class muscle activators and next-in-class muscle inhibitors 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 impact muscle function and contractility. Cytokinetics is collaborating with Amgen Inc. (Amgen) to develop *omecamtiv mecarbil*, a novel cardiac muscle activator. *Omeclamtiv mecarbil* is the subject of an international clinical trials program in patients with heart failure including GALACTIC-HF and METEORIC-HF. Amgen holds an exclusive worldwide license to develop and commercialize *omecamtiv mecarbil* with a sublicense held by Servier for commercialization in Europe and certain other countries. Cytokinetics is collaborating with Astellas Pharma Inc. (Astellas) to develop *reldesemtiv*, a fast skeletal muscle troponin activator (FSTA). Astellas holds an exclusive worldwide license to develop and commercialize *reldesemtiv*. Licenses held by Amgen and Astellas are subject to specified co-development and co-commercialization rights of Cytokinetics. Cytokinetics is also developing CK-274, a novel cardiac myosin inhibitor that company scientists discovered independent of its collaborations, for the potential treatment of hypertrophic cardiomyopathies. Cytokinetics continues its over 20-year history of pioneering innovation in muscle biology and related pharmacology focused to diseases of muscle dysfunction and conditions of muscle weakness.

For additional information about Cytokinetics, visit [www.cytokinetics.com](http://www.cytokinetics.com) and follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#).

### 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 the potential benefits of *reldesemtiv*, including its ability to represent an additive and complementary approach to increase muscle function; Cytokinetics' and its partners' research and development activities; the timing of enrollment of patients in Cytokinetics' and its partners' clinical trials; the design, timing, results, significance and utility of preclinical and clinical results; and the properties and potential benefits of Cytokinetics' 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; 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 FDA 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 *reldesemtiv*; 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.

Contact:  
Cytokinetics  
Diane Weiser  
Vice President, Corporate Communications, Investor Relations  
(415) 290-7757



Source: Cytokinetics, Incorporated