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Fate Therapeutics Announces Publication of Its Proprietary Stem Cell Modulation Platform for Developing iPSC-Based Regenerative Therapeutics

SAN DIEGO, March 6, 2014 (GLOBE NEWSWIRE) -- Fate Therapeutics, Inc. (Nasdaq:FATE), a biopharmaceutical company engaged in the discovery and development of adult stem cell modulators to treat orphan diseases, announced today the publication of an article in the journal *Stem Cell Reports* by Fate scientists demonstrating high-throughput derivation of human induced pluripotent stem cells (hiPSCs) that exhibit characteristics necessary for therapeutic application. The publication describes the use of the Company's hiPSC platform, consisting of stage-specific cell culture systems, to enable rapid, parallel derivation of hiPSC clones and their subsequent expansion as transgene-free, single cells in culture. The Company's proprietary combinations of small molecule modulators, which include ROCK, GSK3 and MEK pathway inhibitors, used in the culture systems were found to be critical in promoting characteristics of the ground state of pluripotency including pluripotent culture stability, homogeneity and survival.

"This publication further highlights the scientific and technological progress we have made in defining the most stable and efficient platform for hiPSC-based cell therapy applications," commented Peter Flynn Ph.D., Senior Vice President, Early Program Development at Fate Therapeutics. "While there are multiple approaches to cellular reprogramming, we are dedicated to deriving hiPSCs with pluripotent qualities necessary for robust, reproducible hiPSC generation and expansion. We believe that the use of our proprietary small molecule inhibitors is critical for enabling the development of potentially transformative, hiPSC-based regenerative therapeutics."

In January of this year, Fate scientists published a separate article in *Stem Cells Translation Medicine* reporting the efficient differentiation of hiPSCs to a homogeneous population of skeletal muscle cells using the Company's proprietary hiPSC platform. In support of the Company's muscle regeneration therapeutic program, Fate scientists sourced fibroblasts from healthy volunteers as well as from patients with Duchenne and Becker muscular dystrophies, reprogrammed the fibroblasts to hiPSCs, and then differentiated the hiPSCs to muscle myoblasts with extremely high efficiency. The hiPSC-derived skeletal muscle cells closely resembled primary muscle cells, and were functionally responsive to treatment with the hypertrophic proteins insulin-like growth factor 1 (IGF-1) and Wnt7a. Fate Therapeutics is currently developing proprietary Wnt7a protein analogs for the treatment of muscle-related diseases and disorders. In addition, the Company is currently researching therapeutic applications of hiPSC-derived myogenic progenitor cells and hematopoietic cells.

About Fate Therapeutics, Inc.

Fate Therapeutics is a clinical-stage biopharmaceutical company engaged in the discovery and development of pharmacologic modulators of adult stem cells to treat orphan diseases, including certain hematologic malignancies, lysosomal storage disorders and muscular dystrophies. The Company utilizes established pharmacologic modalities, including small molecules and therapeutic proteins, and well-characterized biological mechanisms to enhance the therapeutic potential of adult stem cells. The Company has built two adult stem cell modulation platforms: a hematopoietic stem cell (HSC) modulation platform, which seeks to optimize the therapeutic potential of HSCs for treating patients with hematologic malignancies and rare genetic disorders that are undergoing hematopoietic stem cell transplantation, and a muscle satellite stem cell modulation platform, which seeks to activate the regenerative capacity of muscle for treating patients with degenerative muscle disorders. The Company is presently advancing its lead product candidate, PROHEMA®, a pharmacologically-modulated HSC therapeutic derived from umbilical cord blood, in Phase 2 clinical development for hematologic malignancies. Fate Therapeutics is also advancing its proprietary Wnt7a protein analogs in preclinical development for the treatment of muscular dystrophies. Fate Therapeutics is headquartered in San Diego, CA. For more information, please visit www.fatetherapeutics.com.

Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the therapeutic potential of our programs for the modulation of adult stem cells to treat orphan diseases, including PROHEMA® and our Wnt7a protein analogs, our preclinical and clinical development plans, including our ability to resume enrollment of the PROHEMA-03 trial and our ability to initiate IND-enabling activities for our Wnt7a-analog program, and the impact of our hiPSC platform technology. These and any other forward-looking statements in this release are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risk of cessation or delay of any ongoing or planned preclinical or clinical development activities for a variety of reasons, including additional information that may be requested or additional obligations that may be imposed by the FDA as a condition to our resumption or continuation of the PROHEMA-03 trial, any

inability to complete the cell-line development, *in vivo* studies, and pharmacokinetic and toxicology assessments necessary to support further IND-enabling activities and advance our Wnt7a analog program into clinical development, and any inability to develop hiPSCs, and hiPSC-derived cells, suitable for cell-therapy based applications. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the risks and uncertainties detailed in the company's periodic filings with the Securities and Exchange Commission, including but not limited to the company's Form 10-Q for the quarter ended September 30, 2013, and from time to time the company's other investor communications. Fate Therapeutics is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

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