June 5, 2014

Fate Therapeutics to Highlight Potential Clinical Applications of Ex Vivo Hematopoietic Cell Modulation at 12th International Cord Blood Symposium

SAN DIEGO, June 5, 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, today announced that potential clinical applications of its *ex vivo* approach to pharmacologically modulating hematopoietic cells will be presented at the 12th Annual International Cord Blood Symposium being held from June 5-7, 2014 in San Francisco, CA.

Two presentations will summarize the potential clinical benefits of modulating hematopoietic stem cells (HSCs) and T cells *ex vivo*, prior to their administration to patients undergoing allogeneic HSC transplantation (HSCT), using 16,16-dimethyl prostaglandin E2 (dmPGE2), a small molecule derivative of the naturally secreted homeostatic factor prostaglandin E2. In addition, a poster presentation will highlight the potential of the Company's proprietary small molecule-based platform to generate clinical-grade, human induced pluripotent stem cell (hiPSC)-derived therapeutics from an attached segment of an umbilical cord blood unit, while leaving the cord blood unit itself intact and available for later use in HSCT. Fate Therapeutics is currently advancing PROHEMA®, a pharmacologically-modulated HSC therapeutic, in a randomized, controlled Phase 2 clinical trial in adult patients undergoing HSCT for the treatment of hematologic malignancies.

12th Annual International Cord Blood Symposium Presentations

- ***Future Horizons for the Ex Vivo Modulation of Cord Blood*.** On Thursday, June 5th, Dan Shoemaker, Ph.D., Chief Technology Officer of Fate Therapeutics, will give a presentation on "Future Horizons for the *Ex Vivo* Modulation of Cord Blood" as part of a session entitled "Derivative Products from Cord Blood and Placental Tissue" to be held from 1:30 - 3:30 pm. This presentation will explore current and future clinical applications of pharmacologically-modulated umbilical cord blood, including using the Company's therapeutic candidates, in patients with hematologic malignancies and rare genetic disorders.

- ***PGE2-Modulated Umbilical Cord Blood Transplantation.*** On Saturday, June 7th, Corey Cutler, MD, MPH, FRCPC of the Dana Farber Cancer Institute (DFCI) will give a presentation from 11:00 - 11:20 am entitled "PGE2-Modulated Umbilical Cord Blood Transplantation", which will include a review of the enhanced biological properties and potential clinical benefits of pharmacologically-modulated HSCs and T cells, including PROHEMA®. Dr. Cutler served as the principal investigator for the Company's Phase 1b clinical trial of PROHEMA® in adult patients with hematologic malignancies undergoing double umbilical cord blood transplant, which trial demonstrated safety and provided encouraging indications of efficacy including an acceleration in the median time to neutrophil engraftment, an increase in the rate of overall survival at 100-days, and a decrease in the rate of cytomegalovirus reactivation, as compared to historical rates observed at the DFCI and reported in the literature.

- ***hiPSC Generation from Umbilical Cord Blood Segments*.** On Thursday, June 5th, Bahram Valamehr, Ph.D, Associate Director of Reprogramming Biology of Fate Therapeutics, will present a poster from 5:30 - 6:30 pm entitled "hiPSC Generation from Individual Umbilical Cord Blood Sample Segments for Allogeneic cGMP Banking and Cell Therapy Applications". The poster will highlight the use of the Company's proprietary small molecule-based platform to generate transgene-free, genomically-stable hiPSCs from a single frozen segment of a banked umbilical cord blood unit. These findings demonstrate the potential of using attached segments from banked umbilical cord blood units to derive, maintain and bank clinical-grade hiPSC lines without compromising the unit itself.

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. 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, 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, 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 potential mechanisms and therapeutic benefits and applications of our programs for the modulation of adult stem cells and other cell types, our preclinical and clinical development plans including the development of PROHEMA® for the treatment of hematologic malignancies and rare genetic disorders and the development of hiPSC-based therapeutics, and the potential therapeutic benefits of pharmacological modulation of HSCs and T cells. 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 risks that the results observed in prior clinical development may not be replicated in current or subsequent clinical trials of PROHEMA®, that PROHEMA® may not produce the therapeutic benefits suggested by the results observed in preclinical investigation or our prior clinical development, or may cause other unanticipated adverse effects in subsequent clinical trials, and 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 initiation of new clinical trials or continuation of clinical trials with PROHEMA®, or any delays in enrollment of or negative results in clinical trials with PROHEMA®. 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 first quarter ended March 31, 2014, 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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