March 3, 2015

Fate Therapeutics Expands and Strengthens Leadership Team

SAN DIEGO, March 3, 2015 (GLOBE NEWSWIRE) -- Fate Therapeutics, Inc. (Nasdaq:FATE), a biopharmaceutical company engaged in the development of programmed cellular therapeutics for the treatment of severe, life-threatening diseases, today announced that Wendy Levin, M.D., M.S. will join the Company as Vice President, Clinical Development and that Walter Grubb has joined the Company as Vice President, Business Development. Additionally, the Company announced the promotion of John Ferraro to the newly-created position of Vice President, Clinical Operations.

"We are delighted to welcome Wendy and Walter, two accomplished life sciences industry professionals, to our team, and for John to assume additional leadership responsibilities as head of our clinical operations group," said Christian Weyer, M.D., M.A.S., President and Chief Executive Officer of Fate Therapeutics. "The broad experience and expertise of these leaders will be invaluable as we continue to advance a R&D and business development strategy aimed at building a robust pipeline of first-in-class programmed hematopoietic cellular therapeutics for a range of severe, life-threatening disorders."

Dr. Levin will play a critical role spearheading the Company's clinical development of PROHEMA® in patients with hematologic malignancies and rare genetic disorders. Dr. Levin, a board-certified hematologist / oncologist with extensive experience in clinical oncology research, joins Fate Therapeutics from MEI Pharma, where she was Vice President of Clinical Development and Medical Affairs. Previously, she held positions of increasing responsibilities at Pfizer from 2007 to 2013, where she led a global oncology program targeting the hedgehog pathway from first-in-human studies into later-stage development. Dr. Levin completed her Internal Medicine Residency at the University of Southern California, and went on to complete a Hematology / Oncology Fellowship at the University of Washington / Fred Hutchinson Cancer Research Center in Seattle.

Mr. Grubb's responsibilities will include the assessment, valuation and licensing of business opportunities for the Company. Mr. Grubb was previously Executive Director of Business Development and Commercial Operations at Ambit Biosciences, where he was responsible for multiple partnership transactions, provided commercial leadership for product candidates spanning a range of indications and stages of development, and was instrumental in the company's initial public offering and ultimate acquisition by Daiichi-Sankyo. Prior to Ambit, Mr. Grubb held positions of increasing responsibility at Neurocrine Biosciences from 2000 to 2008 that included business development, market analytics, medical affairs and product marketing.

Mr. Ferraro joined Fate Therapeutics in February 2013, and will be responsible for the Company's clinical operations and data management functions. Prior to joining Fate, Mr. Ferraro was the Senior Director of Clinical Operations at GlobeImmune, Inc., where he established the clinical operations group and led the advancement of multiple targeted immunotherapies through the clinical development process in the United States and in Europe. Mr. Ferraro's professional experience spans 20 years of biopharmaceutical industry experience in global clinical operations and research positions at Pfizer and SmithKline Beecham.

About Fate Therapeutics, Inc.

Fate Therapeutics is a clinical-stage biopharmaceutical company engaged in the development of programmed cellular therapeutics for the treatment of severe, life-threatening diseases. The Company's approach utilizes established pharmacologic modalities, such as small molecules, to program the fate and function of cells *ex vivo*. The Company's lead product candidate, PROHEMA®, is an *ex vivo* programmed hematopoietic cellular therapeutic, which is currently in clinical development for the treatment of hematologic malignancies and rare genetic disorders in patients undergoing hematopoietic stem cell transplantation (HSCT). The Company is also using its proprietary induced pluripotent stem cell platform to develop *ex vivo* reprogrammed hematopoietic and myogenic cellular therapeutics. 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 Company's clinical and development plans with respect to PROHEMA and other product candidates. 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 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, any difficulties or delays in patient enrollment in current and planned clinical trials, and any adverse effects or events or other negative results that may be observed in these trials), or the risk that we are unable to conduct or complete preclinical and clinical activities necessary to advance any additional hematopoietic cellular therapeutic product candidates. 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 30th, 2014, and from time to time the Company's other investor communications. Fate Therapeutics is providing the information in this release as of this date and does not undertake any obligation to update any forward-looking statements contained in this release as a result of new information, future events or otherwise.

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