August 12, 2014

Fate Therapeutics Reports Second Quarter 2014 Financial Results

First Data Review in Phase 2 PUMA Study of PROHEMA Supports Continuation of Enrollment

PROMPT and PROVIDE Studies of PROHEMA in Pediatric Patients to Initiate in 2H14

SAN DIEGO, Aug. 12, 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 reported financial results for the second quarter ended June 30, 2014 and announced that an independent Data Monitoring Committee (iDMC), following its first scheduled interim data review of the Company's Phase 2 PUMA study of PROHEMA®, supported the continuation of the study.

"With this first of two planned interim data reviews of our Phase 2 PUMA study of PROHEMA in adult patients with hematologic malignancies now successfully completed, we look forward to providing a clinical update on this study during the fourth quarter of 2014," said Christian Weyer, M.D., M.A.S., President and Chief Executive Officer of Fate Therapeutics. "In addition, we are moving expeditiously towards initiation of our PROMPT and PROVIDE studies of PROHEMA in pediatric patients undergoing hematopoietic stem cell transplantation for the treatment of hematologic malignancies and rare inherited metabolic disorders, respectively. The FDA has cleared initiation of each of these studies, which we expect to begin in the second half of 2014."

Recent Program Developments and Upcoming Milestones

- **First Data Review of Phase 2 PUMA Study Supports Continuation of Enrollment.** In August 2014, the PUMA iDMC conducted its first of two scheduled interim reviews of the randomized, controlled Phase 2 clinical trial of PROHEMA. A total of 10 patients, including seven patients that received PROHEMA plus an unmanipulated cord blood unit and three control patients that received two unmanipulated cord blood units, were included in the first interim review, which assessed safety, time to engraftment, rates of graft failure, early mortality, infection, and graft versus host disease (GvHD). The iDMC did not identify any safety signals and, based on its consideration of the data available on the first ten patients, supported continuation of the PUMA study. A second data review by the iDMC is scheduled after the first 12 patients have been treated with PROHEMA, and the Company intends to provide a clinical update following the completion of this review, which is expected in the second half of 2014. The PUMA study is a 60-patient, Phase 2 clinical trial designed to assess the efficacy and safety of PROHEMA in adult patients undergoing double umbilical cord blood transplantation for the treatment of hematologic malignancies. Full data on the primary efficacy endpoint are anticipated to be available in mid-2015.

- **PROMPT Study in Pediatric Hematologic Malignancies to Begin in 3Q14.** In April 2014, the U.S. Food and Drug Administration (FDA) cleared the Company's Investigational New Drug Application (IND) amendment to evaluate PROHEMA in pediatric patients undergoing single umbilical cord blood transplantation for the treatment of hematologic malignancies. The Phase 1b PROMPT study is designed to enroll up to 18 patients, between the ages of 1 and 18, at three leading U.S. pediatric transplant centers. The primary endpoint of the PROMPT study is safety as assessed by neutrophil engraftment. The study will also evaluate various parameters of efficacy, including additional measures of neutrophil engraftment, platelet engraftment, rates of graft failure, GvHD and serious infection, and disease-free and overall survival.

- **PROVIDE Study in Inherited Metabolic Disorders to Begin in 4Q14.** In July 2014, the FDA cleared the Company's IND to initiate its clinical investigation of PROHEMA in pediatric patients undergoing single umbilical cord blood transplantation for the treatment of inherited metabolic disorders (IMDs), where cellular enzyme replacement through unrelated donor cord blood transplantation has emerged as a potentially transformative therapeutic intervention. The Phase 1b PROVIDE study is designed to enroll up to 12 patients with various forms of IMDs, between the ages of 1 and 18, at up to three leading U.S. pediatric transplant centers. The study inclusion criteria allow for the enrollment of patients with different types of lysosomal and peroxisomal storage diseases such as Hurler and Hunter syndromes, Krabbe disease and various other leukodystrophies, among others. The primary endpoint of the PROVIDE study is safety as assessed by neutrophil engraftment. In *in vivo* murine models of allogeneic HSC transplantation, the Company has demonstrated that the use of PROHEMA, as compared to unmodulated HSCs, led to a significant increase both in the engraftment of donor HSCs and in the donor-derived expression of enzyme in the brain.

- **Expanded Muscle Regeneration Franchise with Selection of First Investigational Cell Therapeutic from Company's Proprietary iPSC Platform.** During the second quarter of 2014, the Company initiated a new program focused on the development of an induced pluripotent stem cell (iPSC)-derived myogenic progenitor cell therapeutic

(iMPC), which is the first investigational cell therapeutic to emerge from the Company's proprietary iPSC platform. The Company is currently optimizing the generation of iMPCs and assessing their therapeutic potential in models of degenerative muscle disease. In addition, the Company continues to advance its two lead Wnt7a protein analogs for muscle regeneration through preclinical assessment and cell line development in order to inform its selection of a single lead product form for continued preclinical development.

Financial Results and Financial Guidance

- **Cash Position:** Cash and cash equivalents as of June 30, 2014 were $42.0 million, compared to $54.0 million as of December 31, 2013. The decrease was primarily driven by our use of cash in operating activities of $10.7 million during 2014. On July 30, 2014, the Company entered into an Amended and Restated Loan and Security Agreement with Silicon Valley Bank (SVB), under which SVB agreed to make loans to the Company in an aggregate principal amount of up to $20 million, of which $10 million was immediately available and $10 million remains available subject to the achievement of a specified clinical milestone relating to the Company's Phase 2 clinical trial of PROHEMA. The Company has accessed $10 million of the debt facility, generating net proceeds of $8.8 million after the repayment of the principal balance owed to SVB under the Company's existing loan agreement and transaction fees.

- **Total Operating Expenses:** Total operating expenses for the second quarter of 2014 were $6.0 million, compared to $4.6 million for the second quarter of 2013. Operating expenses for the second quarter of 2014 include $0.4 million of stock compensation expense, compared to $0.1 million for the second quarter of 2013.

- **R&D Expenses:** Research and development expenses for the second quarter of 2014 were $4.0 million, compared to $3.1 million for the second quarter of 2013. The increase in R&D expenses is primarily related to additional headcount and costs associated with the clinical and preclinical development of our product candidates. The overall increase is comprised of an increase in compensation and benefits expense, including stock-based compensation expense, and professional consultant and service provider expenses related to the conduct of our PUMA study, which commenced in March 2014. Research and development expenses for the second quarter of 2014 included a stock-based compensation charge of $0.2 million.

- **G&A Expenses:** General and administrative expenses for the second quarter of 2014 were $2.1 million, compared to $1.5 million for the second quarter of 2013. The increase in G&A expenses is primarily related to the expansion of our operating activities, which included additional headcount and costs associated with being a publicly-traded company. The overall increase is comprised of an increase in compensation and benefits expense, including stock-based compensation expense, and in external services, including legal and accounting fees and insurance costs. General and administrative expenses for the second quarter of 2014 included a stock-based compensation charge of $0.2 million.

- **Common Shares Outstanding:** Common shares outstanding as of June 30, 2014 were 20.6 million, compared to 20.4 million as of December 31, 2013. Common shares outstanding as of both dates reflect the impact of the Company's IPO on October 4, 2013 which included the automatic conversion of the Company's convertible preferred stock into common stock, the automatic conversion of the Company's convertible promissory notes into common stock and the issuance of common stock upon the retirement of the Company's exchangeable share liability.

- **Financial Guidance.** Fate expects that its existing cash, cash equivalents and marketable securities, including net proceeds under the first tranche of the SVB debt facility, will be sufficient to fund its operating expenses and capital expenditure requirements through 2015.

Today's Conference Call and Webcast

The Company's management will conduct a conference call on Tuesday, August 12, 2014 at 5:00 p.m. EDT to report on the Company's financial and operating results for the second quarter ended June 30, 2014 and to provide a corporate update. In order to participate in the conference call, please dial 1-877-303-6235 (domestic) or 1-631-291-4837 (international) and refer to conference ID 81279682. The live webcast can be accessed under "Events & Presentations" in the Investors and Media section of the Company's website at www.fatetherapeutics.com. The archived webcast will be available on the Company's website beginning approximately two hours after the event.

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, including small molecules and therapeutic proteins, to treat orphan diseases. 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 HSC product candidate, PROHEMA®, in Phase 2

clinical development for hematologic malignancies, while 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 PROHEMA®, our Wt7a protein analogs and any therapeutics generated from our iPSC platform, and our preclinical and clinical development plans, including the timing of the initiation of our PROVIDE and PROMPT studies, the timing and results of the scheduled interim data reviews and availability of full data for the PUMA trial, our ability to conduct the PUMA, PROVIDE and PROMPT studies, the timing of and our ability to advance a Wnt7a protein analog through preclinical development to inform our selection of a lead product candidate, and our projected cash runway. 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 of PROHEMA® observed in prior preclinical and clinical development may not be replicated in our PUMA, PROVIDE and PROMPT clinical trials, or other current or subsequent clinical trials, of PROHEMA®, and that PROHEMA® may not produce the therapeutic benefits suggested by the results observed in our prior clinical development, or may cause other unanticipated adverse effects, in current or subsequent clinical trials, 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 commencement and continuation of clinical trials with PROHEMA®, any difficulties or delays in patient enrollment in the PUMA, PROVIDE and PROMPT studies, any adverse events or other negative results that may be observed in these studies, or any inability to conduct or complete preclinical assessment of our Wnt7a protein analogs, including preclinical activities necessary to inform our selection of a lead product candidate and support further IND-enabling activities, advancement into cGMP manufacturing activities, and clinical development. 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 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.

Availability of Other Information about Fate Therapeutics, Inc.

Investors and others should note that we routinely communicate with our investors and the public using our company website (www.fatetherapeutics.com) and our investor relations website (ir.fatetherapeutics.com), including without limitation, through the posting of investor presentations, Securities and Exchange Commission filings, press releases, public conference calls and webcasts on our websites. The information that we post on these websites could be deemed to be material information. As a result, we encourage investors, the media, and others interested in Fate Therapeutics to review the information that we post on these websites on a regular basis. The contents of our website, or any other website that may be accessed from our website, shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

Condensed Consolidated Statements of Operations and Comprehensive Loss

(in thousands, except share and per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2013	2014	2013
	(unaudited)			
Revenues:				
Collaboration revenue	$ —	$ 208	$ —	$ 417
Grant revenue	—	82	—	345
Total revenue	—	290	—	762
Operating expenses:				
Research and development	3,968	3,067	8,490	5,598
General and administrative	2,072	1,492	4,487	2,789
Total operating expenses	6,040	4,559	12,977	8,387
Loss from operations	(6,040)	(4,269)	(12,977)	(7,625)

Other income (expense):				
Interest income	1	—	1	1
Interest expense	(28)	(88)	(71)	(188)
Change in fair value of exchangeable shares	—	(1,155)	—	(1,260)
Change in fair value of warrant liability	—	(22)	—	(10)
Total other expense, net	(27)	(1,265)	(70)	(1,457)
Net loss and comprehensive loss	$ (6,067)	$ (5,534)	$ (13,047)	$ (9,082)
Net loss per common share, basic and diluted	$ (0.30)	$ (4.46)	$ (0.64)	$ (7.41)
Weighted-average common shares used to compute basic and diluted net loss per share	20,467,782	1,239,524	20,407,632	1,226,451

Condensed Consolidated Balance Sheets

(in thousands)

	June 30, 2014	December 31, 2013
Assets	**(unaudited)**	
Current assets:		
Cash and cash equivalents	$ 42,012	$ 54,036
Prepaid expenses and other assets	233	615
Total current assets	42,245	54,651
Long-term assets	1,306	932
Total assets	$ 43,551	$ 55,583
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	$ 2,928	$ 2,721
Other current liabilities	884	1,879
Total current liabilities	3,812	4,600
Other long-term liabilities	101	135
Stockholders' equity	39,638	50,848
Total liabilities and stockholders' equity	$ 43,551	$ 55,583

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