

Fate Therapeutics Announces Issuance of U.S. Patent Covering Use of Viral Transduction Enhancers in Gene Therapy

Patent Broadly Protects the Use of Prostaglandins for Enhancing Gene Transfer in Blood Stem Cells

SAN DIEGO, Aug. 16, 2017 (GLOBE NEWSWIRE) -- Fate Therapeutics, Inc. (NASDAQ:FATE), a biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders, announced today that the U.S. Patent and Trademark Office has issued U.S. Patent No. 9,675,641 covering the use of

prostaglandins as viral transduction enhancers for the genetic modification of CD34⁺ hematopoietic cells. The patent, which expires in 2029, is owned by the Indiana University Research and Technology Corporation and is licensed exclusively to Fate Therapeutics in all fields.

"The use of small molecules in the manufacture of cell therapies is proving to be a key component for promoting efficacy. Studies have demonstrated that *ex vivo* small molecule modulation can enhance the viral transduction, engraftment and

survival of CD34⁺ cells and the persistence, proliferation and anti-tumor activity of NK cells and T cells," said Scott Wolchko, President and Chief Executive Officer of Fate Therapeutics. "Using prostaglandins to improve vector copy number and percentage of hematopoietic cells transduced in the manufacture of gene therapies is a promising approach to help enable the development of curative treatments for a range of severe genetic disorders."

This newly-issued patent is the second issued U.S. patent in this family. The Company's proprietary rights broadly cover methods of using prostaglandins and viral vectors, including lentiviral vectors, to enhance *ex vivo* genetic engineering of hematopoietic cells. The Company also has filed corresponding patent applications to seek similar patent protection in key markets throughout the world, including Europe and Japan.

Fate Therapeutics has an extensive intellectual property portfolio covering *ex vivo* small molecule modulation of hematopoietic cells. Multiple groups have shown that *ex vivo* small molecule modulation, including modulation with prostaglandins in particular, has the potential to significantly enhance the efficacy of hematopoietic cell therapies.

About Fate Therapeutics, Inc.

Fate Therapeutics is a clinical-stage biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders. The Company's hematopoietic cell therapy pipeline is comprised of NK-and T-cell immuno-oncology programs, including off-the-shelf product candidates derived from engineered induced pluripotent cell lines, and immuno-regulatory programs, including product candidates to prevent life-threatening complications in patients undergoing hematopoietic cell transplantation and to promote immune tolerance in patients with autoimmune disease. Its adoptive cell therapy programs are based on the Company's novel *ex vivo* cell programming approach, which it applies to modulate the therapeutic function and direct the fate of immune cells. Fate Therapeutics is headquartered in San Diego, CA. For more information, please visit <u>www.fatetherapeutics.com</u>.

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 scope and enforceability of the Company's intellectual property portfolio. 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 that any of the patents in the Company's intellectual property portfolio may be challenged and that such a challenge may be successful, resulting in loss of any such patent or loss or reduction in the scope of one or more of the claims of a challenged patent. 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 most recently filed periodic report, 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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