

Fate Therapeutics Announces Preclinical Data Highlighting Persistent Effector Function of Allogeneic Natural Killer Cell Cancer Immunotherapy

Adaptive NK Cell Therapy Advancing Toward First-in-Human Clinical Trial in Collaboration with University of Minnesota

Program to be Presented Today at Innate Killer Summit 2016

SAN DIEGO, May 16, 2016 (GLOBE NEWSWIRE) -- Fate Therapeutics, Inc. (NASDAQ:FATE), a biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders, today announced the presentation of its Adaptive NK Cell Therapy at the Innate Killer Summit 2016 being held May 16-17 in San Diego, California. Scientists from Fate Therapeutics and the University of Minnesota demonstrated through *in vivo* and *in vitro* preclinical studies that Adaptive NK cells exhibit enhanced persistence and deliver potent anti-tumor activity alone and in combination with therapeutic monoclonal antibodies. Fate Therapeutics is advancing its Adaptive NK Cell Therapy through clinical translation under a research collaboration with the University of Minnesota led by Dr. Jeffrey Miller, M.D., Professor of Medicine and Deputy Director, Masonic Cancer Center, University of Minnesota.

"Adaptive NK cells are a unique set of immune cells that exhibit enhanced persistence, survival and effector function in our preclinical studies. This long-lived, multifaceted ability to kill tumor cells without prior antigen exposure, while leaving normal cells unharmed, may represent one of the most promising cell-based strategies for combating cancer," said Dr. Miller. "The preclinical data support clinical investigation, and the Masonic Cancer Center, University of Minnesota looks forward to advancing the Adaptive NK Cell Therapy into first-in-human clinical trials in collaboration with Fate Therapeutics."

The scientific team at Fate Therapeutics and the University of Minnesota demonstrated that Adaptive NK cells have persistent effector function against malignant targets, as compared to conventional NK cells, through both cellular cytotoxicity and cytokine secretion in preclinical studies. Additionally, when used in combination with several different therapeutic antibodies targeting specific tumor antigens including CD20, HER2 and EGFR targets in preclinical models, Adaptive NK cells significantly augmented antibody-directed cellular cytotoxicity (ADCC). These data support the potential clinical investigation of Adaptive NK cells in the setting of both liquid and solid tumors.

"The one-time administration of an allogeneic cell therapy that has the potential to persist, and to deliver potent tumorspecific killing through multiple immuno-modalities without requiring tumor antigen recognition, poses a disruptive approach to the patient-sourced, cell-based cancer immunotherapy field," said Scott Wolchko, President and Chief Executive Officer of Fate Therapeutics. "We believe the highly-differentiated product profile of our Adaptive NK Cell Therapy opens up exciting development opportunities across some of the most deadly cancers, including acute myeloid leukemia, head and neck cancer and colorectal cancer."

About Adaptive NK Cell Therapy

The Adaptive NK Cell Therapy is a programmed adoptive immunotherapy that is undergoing preclinical development for applications in immuno-oncology. The cell-based cancer immunotherapy is comprised of a highly-specialized population of NK cells expressing the maturation marker CD57 and the cytomegalovirus-induced memory-like activating receptor NKG2C. The Adaptive NK Cell Therapy is produced by programming CD3/CD19-depleted, donor-sourced NK cells with a proprietary combination of modulators including the small molecule FT1238.

About Fate Therapeutics, Inc.

Fate Therapeutics is a biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders. The Company's cell therapy pipeline is comprised of immuno-oncology programs, including off-the-shelf NK- and T-cell cancer immunotherapies derived from engineered induced pluripotent cells, and immuno-regulatory programs, including hematopoietic cell immunotherapies for protecting the immune system of patients undergoing hematopoietic cell transplantation and for suppressing autoimmunity. 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 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 advancement of, and the anticipated timing, progress, milestones and plans related to, the Company's adoptive immunotherapy programs. 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 results observed in prior studies, including preclinical studies of the Company's Adaptive NK Cell Therapy, will not be observed in ongoing or future studies involving these product candidates, the risk that the Company may cease or delay preclinical or clinical development activities for any of its existing or future product candidates for a variety of reasons (including requirements that may be imposed by regulatory authorities and requirements for regulatory approval, difficulties or delays in patient enrollment in current and planned clinical trials, and any adverse events or other negative results that may be observed during preclinical or clinical development), the risk that the Company's research collaborations, including with the University of Minnesota, may not be successful or may be terminated, and the risk that product candidates may not provide the anticipated therapeutic benefits. 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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