Fate Therapeutics
Guiding cells to improve life

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Fate Therapeutics Secures Foundational Patent for IPS Cell Programming

U.S. Patent Covers Key Compositions Used in the Generation of Human Induced Pluripotent Stem Cells

San Diego, CA – Fate Therapeutics, Inc. announced today that the United States Patent and Trademark Office has granted a patent covering compositions that are broadly utilized throughout the field of induced pluripotent stem cell (iPSC) technology. U.S. Patent No. 8,071,369, entitled "Compositions for Reprogramming Somatic Cells," claims a composition comprising a somatic cell having an exogenous nucleic acid that encodes an Oct4 protein introduced into the cell. The invention by Rudolf Jaenisch, M.D., founding member of the Whitehead Institute for Biomedical Research and scientific founder of Fate Therapeutics, represents the second patent granted under U.S. Patent Application Number 10/997,146, which has a priority date of November 26, 2003. Fate Therapeutics holds an exclusive license to the patent for pharmaceutical applications, including for drug discovery and validation, disease modeling, and therapeutic purposes.

"This issuance further validates the groundbreaking contributions of Dr. Jaenisch to the field of cellular reprogramming," said Dr. John Mendlein, a founder of Fate Therapeutics. "His pioneering discoveries created a revolution in stem cell research, and major academic, research and commercial laboratories throughout the world are now aggressively working to unlock the therapeutic potential of iPSC technology for the benefit of patients."

In his 2003 U.S. patent application, Dr. Jaenisch first described the generation of human pluripotent cells from somatic cells, and how reprogrammed human cells might enable autologous cell therapy including for the treatment of neurological diseases such as Alzheimer's, Parkinson's or ALS. The application is the first to describe key compositions, broad methods and key agents to reprogram human somatic cells to a pluripotent state. Because reprogrammed human cells have been shown to behave similarly to embryonic stem cells with respect to their ability to differentiate into various cell types, reprogrammed human cells hold significant promise for the creation of human disease‐specific models for drug screening and for the development of stem cell based therapeutics.