



Fate Therapeutics

Guiding cells to improve life

July 8, 2009

Fate Therapeutics to Present Data on Stimulation of Osteogenic Activity Using Small Molecule Modulators of WNT Pathway

La Jolla, CA and Barcelona – Fate Therapeutics, Inc. announced today the presentation of data from its research on small molecule modulators of the Wnt pathway for osteo-regeneration at the 7th Annual Meeting of the International Society for Stem Cell Research (ISSCR) in Barcelona, Spain. In its findings, the Company demonstrated that selected Wnt activators induce the differentiation of mesenchymal stem cells to mature, bone-forming osteoblasts. The study highlights the potential for using small molecule Wnt activators as osteogenic agents. Because osteogenic agents stimulate positive bone growth, they may offer an improved course of action in clinical settings ranging from orthopedics to osteoporosis as compared to current medications aimed at preventing bone decay.

“By applying our knowledge of adult stem cell biology to mesenchymal stem cell populations, we have identified osteogenic small molecules that can direct lineage-specific differentiation to an osteoblast phenotype,” said Paul Grayson, president and CEO of Fate Therapeutics. “While current therapies focus on blocking bone degeneration, novel small molecules that promote bone formation represent the next-generation of therapeutic agents for osteo-regenerative medicine.”

Fate Therapeutics is utilizing its adult stem cell biology engine and induced pluripotent stem cell (iPSC) technology platform to develop Stem Cell Modulators (SCMs) – small molecules and biologics that guide cell fate for therapeutic purposes. Naturally-occurring adult stem cells, such as mesenchymal stem cells, can differentiate into a variety of cell types and are found in almost all tissues or organs in the body where they are primarily responsible for maintaining and repairing their native tissue. The ability of SCMs to promote bone regeneration may be applied to treat a number of bone injuries and conditions including non-union fracture, spinal fusion or osteoporosis.

The Company’s poster entitled, “A small molecule activator of the canonical Wnt pathway stimulates differentiation of mesenchymal stem cells to an osteoblast phenotype,” will be presented by Scott Thies, Ph.D., senior director of stem cell biology at Fate Therapeutics, at ISSCR on Friday, July 10 from 4:45 p.m. to 7:00 p.m. CEST.