

# Calithera Biosciences Gains Exclusive, Worldwide License to TransTech Pharma's Hexokinase II Inhibitor Program

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SOUTH SAN FRANCISCO, Calif., March 5, 2015 (GLOBE NEWSWIRE) -- Calithera Biosciences, Inc. (Nasdaq:CALA), a clinical-stage pharmaceutical company focused on discovering and developing novel small molecule drugs directed against tumor metabolism and tumor immunology targets for the treatment of cancer, announced today an exclusive global license agreement with TransTech Pharma, a clinical stage pharmaceutical company, granting Calithera exclusive world-wide rights to research, develop and commercialize TransTech's portfolio of hexokinase II inhibitors. Hexokinase II is the first and rate-limiting enzyme in the pathway that enables cancer cells to convert glucose to energy and building blocks that feed cancer cell growth. Under the terms of the agreement, Calithera will obtain exclusive, worldwide rights to TransTech's hexokinase II inhibitors for research, development and commercialization. TransTech will receive an upfront payment and will be eligible to receive future development and commercialization milestones as well as royalties on sales of approved products.

"TransTech's hexokinase II inhibitor program will further expand Calithera's portfolio of pre-clinical programs and solidify our leadership in the area of tumor metabolism drug research and development as we are now able to target two essential nutrients that cancer cells rely on for growth and survival: glutamine and glucose," said Susan M. Molineaux, CEO, Calithera Biosciences. "We believe we can apply our expertise to rapidly advance TransTech's potent small-molecule hexokinase II inhibitors into the clinic to become our third potential first-in-class therapy for cancer patients."

#### **About Tumor Metabolism and Hexokinase II Inhibitors**

The field of tumor metabolism seeks to exploit the unique ways in which cancer cells take up and utilize nutrients in order to grow and proliferate. Cancer cells have altered cellular metabolic pathways to acquire and utilize these nutrients and redirect them to provide the necessary building blocks for growth. When these metabolic pathways are blocked, cancer cells are essentially starved of critical nutrients and stop growing or die, whereas normal cells are largely unaffected.

Most cancer cells have increased uptake of the sugar glucose relative to surrounding normal cells. This phenomenon forms the basis for the widely used tumor imaging procedure known as <sup>18</sup>F-2-deoxyglucose (FDG)/PET. Tumors take up more FDG, a radioactive glucose analog, than the surrounding normal tissue and this differential can be visualized with PET imaging. Not only do tumors take up more glucose, but they also utilize the nutrient in a unique way. Tumors convert glucose into lactic acid in a process known as aerobic glycolysis or the "Warburg effect", a route rarely utilized in normal cells. This unique uptake and processing of glucose by tumors relative to normal tissue creates an opportunity to selectively target tumors by cutting off their ability to use this fuel.

In many cancers, hexokinase II is over expressed and has been linked to more aggressive and invasive tumors. Pre-clinical studies in mice have confirmed that the reduction of hexokinase II activity through genetic deactivation (siRNA knockdown studies) results in a significant reduction of tumor growth. The hexokinase inhibitors in-licensed from TransTech may provide an opportunity to inhibit the unique way cancer cells utilize glucose, and the overall Warburg effect, which could result in new treatments for cancer.

#### **About Calithera Biosciences**

Calithera Biosciences, Inc. is a clinical-stage pharmaceutical company focused on discovering and developing novel small molecule drugs directed against tumor metabolism and tumor immunology targets for the treatment of cancer. Calithera's lead product candidate, CB-839, an orally bioavailable inhibitor of glutaminase, is currently being evaluated in three Phase 1 clinical trials in solid and hematological cancers. Calithera is headquartered in South San Francisco. For more information about Calithera, please visit www.calithera.com.

## About TransTech Pharma

TransTech Pharma, LLC is a privately held, clinical-stage pharmaceutical company focused on the discovery and development of human therapeutics to fill unmet medical needs. The Company's high-throughput drug discovery platform, Translational Technology®, translates the functional modulation of human proteins into safe and effective medicines. TransTech Pharma, LLC has a pipeline of small-molecule clinical and pre-clinical drug candidates for the treatment of a wide range of human diseases, including central nervous system disorders, diabetes and metabolic disorders, inflammation and oncology. For further company information, visit <a href="https://www.ttpharma.com">www.ttpharma.com</a>.

### **Forward-Looking Statements**

This news release contains forward-looking statements by Calithera that involve risks and uncertainties. These statements include those related to Calithera's ability to rapidly advance TransTech's potent small-molecule hexokinase II inhibitors into the clinic; that hexokinase II inhibitors may have therapeutic potential in the treatment of cancer; and the potential of tumor metabolism pathways to be transformational in the treatment of cancer. Actual results may differ from Calithera's expectations and important factors that could cause actual results to differ materially. Calithera's hexokinase II inhibitor program or other potential product candidates that Calithera develops may not progress through clinical development or receive required regulatory approvals within expected timelines or at all. In addition, clinical trials may not confirm any safety, potency or other product characteristics described or assumed in this press release. Such product candidates may not be beneficial to patients or successfully commercialized. The failure to meet expectations with respect to any of the foregoing matters may have a negative effect on Calithera's stock price. Additional information concerning these and other risk factors affecting Calithera's business can be found in Calithera's Quarterly Report on Form 10-Q for the period ended September 30, 2014 and other periodic fillings with the Securities and Exchange Commission at <a href="https://www.sec.gov">www.sec.gov</a>. These forward-looking statements are not guarantees of future performance and speak only as of the date hereof, and, except as required by law, Calithera disclaims any obligation to update these forward-looking statements to reflect future events or circumstances.

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