



Calithera Presents Preclinical Study Findings for CB-839 at the 2015 Novel Cancer Therapeutics Summit

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Potential to Combine With PD-1/PD-L1 Inhibitors and Other Immuno-Oncology Therapies

SOUTH SAN FRANCISCO, Calif., Nov. 16, 2015 (GLOBE NEWSWIRE) -- Calithera Biosciences, Inc. (Nasdaq:CALA), a clinical stage biotechnology company focused on the development of novel cancer therapeutics, will announce new preclinical data today for its lead therapeutic candidate, CB-839, at the 2015 Global Technology Community (GTC) Novel Cancer Therapeutics Summit in San Francisco, California. CB-839 is a potent, selective, orally bioavailable glutaminase inhibitor currently in phase I clinical trials. The first preclinical studies combining CB-839 with an immune checkpoint inhibitor were presented demonstrating that CB-839 significantly increases the rate of tumor regressions in syngeneic mice when CB-839 is added to anti-PD-L1.

"The new data presented at the GTC meeting provide us with the rationale to continue developing CB-839 in combination with multiple classes of therapeutics, and to expand our development program to include immunotherapy agents," said Susan Molineaux, PhD, President and Chief Executive Officer of Calithera. "We continue to leverage our expertise in tumor and cellular metabolism to enhance our understanding of metabolic checkpoints in cancer."

Preclinical data will be presented in an oral presentation titled, "Identification of Biomarkers and Combination Agents for the Glutaminase Inhibitor CB-839 for the Treatment of Cancer," by Francesco Parlati, PhD, Senior Director of Biology at Calithera Biosciences. Included in the presentation are the results of studies investigating the preclinical anti-tumor activity of CB-839 in combination with an anti-PD-L1 antibody. The combination of CB-839 and anti-PD-L1 increased the number of tumor regressions seen with anti-PD-L1 treatment in the CT-26 syngeneic colon carcinoma model. Synergistic effects with CB-839 and anti-PD-L1 were also observed in a B16 melanoma model. PD-L1 ligation of PD-1 on the surface of T cells blocks metabolism of glucose and glutamine, depriving T cells of nutrients necessary for activation and differentiation. The mechanism of action of anti-PD-L1 combined with CB-839, two agents that effect metabolism in the tumor microenvironment, is being explored in further studies.

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, is currently being evaluated in three Phase 1 clinical trials in solid and hematological cancers. CB-1158 is a first-in-class immuno-oncology metabolic checkpoint inhibitor targeting arginase, a critical immunosuppressive enzyme responsible for T-cell suppression by myeloid-derived suppressor cells. Arginase depletes arginine, a nutrient that is critical for the activation, growth and survival of the body's cancer-fighting immune cells, known as cytotoxic T-cells. Calithera is headquartered in South San Francisco, California. For more information about Calithera, please visit www.calithera.com.

Forward Looking Statements

Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "anticipate," "estimate," "intend," "poised" and similar expressions (as well as other words or expressions referencing future events, conditions, or circumstances) are intended to identify forward-looking statements. These statements include those related to the clinical activity, tolerability and unique mechanism of action of CB-839, the safety of CB-839 and the initiation of multiple expansion cohorts in solid tumor types and Calithera's intention to expand its CB-839 development program to include immunotherapy agents. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. The 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 most recent Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission, and other periodic filings with the Securities and Exchange Commission at www.sec.gov. 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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