



Calithera to Present Data Highlighting Newly Discovered Synthetic Lethal Target VPS4 at AACR 2022 Annual Meeting

March 8, 2022

First data from preclinical synthetic lethality program of novel VPS4A inhibitors with potential for clinical advancement in variety of cancers

SOUTH SAN FRANCISCO, Calif., March 08, 2022 (GLOBE NEWSWIRE) -- Calithera Biosciences, Inc. (Nasdaq: CALA), a clinical-stage, precision oncology biopharmaceutical company, today announced that it will present the first data from its preclinical synthetic lethality pipeline at the American Association for Cancer Research (AACR) 2022 Annual Meeting, being held April 8-13, 2022, in New Orleans, LA.

The accepted poster will detail Calithera's discovery of a novel series of vacuolar protein sorting-associated protein 4A (VPS4A) inhibitors that are currently advancing through lead optimization. VPS4A and VPS4B are paralog ATPases essential for remodelling intracellular organelle membranes. Membrane remodelling is an essential cellular function and loss of function of both VPS4 paralogs is lethal to cells. The preclinical data demonstrate that VPS4A genetic inhibition in cell lines with loss of VPS4B preferentially showed profound death in cancer cells.

"The data being shared at the AACR annual meeting suggest that inhibition of VPS4A is a promising approach to treat cancers across a wide variety of cancer types that harbor VPS4B deletions. We believe the discovery of this series of VPS4A inhibitors is a significant step forward in our efforts to expand our pipeline of targeted therapies to ultimately treat patients with high unmet need," said Susan Molineaux, chief executive officer of Calithera. "Additionally, we are excited about the progress we have made in advancing these discoveries as we focus on lead optimization. Synthetic lethal cancer therapies are highly promising, and we look forward to contributing to this rapidly advancing field with this novel mechanism."

Calithera is building a robust preclinical pipeline of additional synthetic lethality targets with a continuing focus on paralog genes. Gene paralog pairs represent a promising class of synthetic lethal cancer targets. When a tumor cell loses one paralog, the cell is dependent on the second paralog to carry out an essential cellular process, since loss of both paralogs leads to tumor cell death. Calithera researchers have confirmed VPS4A and VPS4B as synthetic lethal paralog pairs, noting that both homozygous and heterozygous loss of VPS4B in cancer cells makes them vulnerable to VPS4A inhibition. VPS4B is lost in a heterozygous fashion in the majority of colorectal cancer, pancreatic ductal adenocarcinoma, ovarian, esophageal and head & neck cancers and is deleted in large numbers of other tumor types. At AACR 2022, Calithera will report the discovery of a series of novel, small-molecule VPS4A inhibitors which have potential in the treatment of VPS4B-deleted tumors.

Details of the abstract accepted for presentation at AACR 2022 (#1816) are as follows:

- **Title:** Identification of novel VPS4A inhibitors for the treatment of VPS4B-deleted cancers
- **Session Category:** Experimental and Molecular Therapeutics/Drug Targets
- **Session Title:** Drug Targets
- **Date and Time:** Monday Apr 11, 2022, 1:30 PM - 5:00 PM
- **Location:** New Orleans Convention Center, Exhibit Halls D-H, Poster Section 23
- **Poster Board Number:** 14
- **Permanent Abstract Number:** 1816
- **Presenter:** Meredith Kuo, Ph.D.

This abstract is currently available on the AACR website, and the poster will be available on Calithera's website on April 8, 2022.

About Calithera

Calithera Biosciences is a clinical-stage, precision oncology biopharmaceutical company developing targeted therapies to redefine treatment for biomarker-specific patient populations. Driven by a commitment to rigorous science and a passion for improving the lives of people impacted by cancer and other life-threatening diseases, Calithera is advancing a robust pipeline of investigational, small molecule oncology compounds with a biomarker-driven approach that targets genetic vulnerabilities in cancer cells to deliver new therapies for patients suffering from aggressive hematologic and solid tumor cancers for which there are currently limited treatment options.

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 safety, tolerability and efficacy of Calithera's product candidates, the overall advancement of Calithera's product candidates in preclinical development and clinical trials, the unmet need in the treatment of patients with advanced disease, and Calithera's plans to continue development of its product candidates. 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 be 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 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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