Vincerx Pharma Presents Preclinical Data on VIP924, a First-in-Class Antibody-Drug Conjugate (ADC), at the 2023 American Association for Cancer Research (AACR) Annual Meeting

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VIP924, a first-in-class CXCR5-ADC showed significant activity in patient-derived (PDX) lymphoma mouse models

PALO ALTO, Calif., April 19, 2023 (GLOBE NEWSWIRE) -- Vincerx Pharma, Inc. (Nasdaq: VINC), a biopharmaceutical company aspiring to address the unmet medical needs of patients with cancer through paradigm-shifting therapeutics, today presented a poster of VIP924 preclinical data at the 2023 American Association for Cancer Research (AACR) Annual Meeting.

VIP924 consists of an anti-CXCR5 humanized monoclonal antibody with a novel linker containing a unique peptide sequence specifically cleaved by legumain—a tumor-associated lysosomal protease. Inside the tumor cell, upon legumain cleavage, the active payload, VIP716, is released. VIP716 is a novel highly potent and selective kinesin spindle protein inhibitor (KSPi), which has been modified with a hydrophilic CellTrapper™ moiety to reduce membrane permeability without having a negative impact on efficient target binding. This modification allows for intracellular accumulation of VIP716 in CXCR5+ tumor cells, providing greater efficacy, and prevents cellular penetration into healthy tissues, reducing toxicity.

“We are thrilled to continue advancing our bioconjugation platform with our newest ADC, VIP924,” said Ahmed Hamdy M.D., Chief Executive Officer of Vincerx. “At AACR, VIP924 showed meaningful preclinical activity in a panel of lymphoma cell lines and in cell line-derived and patient-derived lymphoma mouse models. Most notably, mouse models implanted with tumor cells from lymphoma patients demonstrated significant tumor growth inhibition and prolonged survival after VIP924 treatment. Showing activity in mouse models implanted with tumor cells from patients, also known as PDX models, is particularly meaningful because PDX models are more representative of the complexity of human cancer than results seen with cell lines.”

Dr. Hamdy continued, “Despite progress in the treatment of B-cell malignancies, there is still an unmet medical need, especially for patients with relapsed or refractory disease. The results presented at AACR, together with our previous efficacy findings of durable complete tumor regression in CXCR5-positive, ibrutinib-refractory lymphoma models, suggest that VIP924 has the potential to be a treatment option for relapsed and refractory patients. Looking at the totality of preclinical data we’ve generated, including the data we presented at ASH that showed how our next generation linker, payload, and CellTrapper™ technology significantly improved the safety and efficacy of the approved ADC, Mylotarg™, we can’t help but be excited about the future of our ADC programs. We look forward to filing the IND for VIP924 in mid-2024.”

Key Presentation Highlights:
Poster presentation, titled, *CXCR5 is a very promising drug target for the development of antibody-drug conjugates to treat patients with lymphoma*, presented by Tibor Schomber, Ph.D., Vincerx Pharma GmbH, Monheim, Germany, include:

- High expression of CXCR5 was observed by immunohistochemistry on naive and previously treated diffuse large B-cell lymphoma (DLBCL), follicular lymphoma (FL), mantle cell lymphoma (MCL), and chronic lymphocytic leukemia (CLL) samples; with limited expression in healthy tissues.
- VIP924 showed superior in vitro cytotoxicity across different non-Hodgkin lymphoma cell lines compared with other B-cell lymphoma targeting antibodies conjugated to the same effector chemistry including, CD19-KSPi, CD22-KSPi, and CD70-KSPi.
- VIP924 (10mg/kg) resulted in significant tumor growth inhibition in two DLBCL patient-derived tumor models: 68% in a low CXCR5-expressing model and 87% in a high CXCR5-expressing model. Prolonged survival of VIP924-treated animals was observed in both models. No effect on body weight or any adverse effects in the VIP924-treated mice were observed.
- To determine the efficacy of VIP924 in large, established tumors, a single VIP924 dose of 10mg/kg was administered in mice transplanted with the HBL-1 lymphoma cell line. Complete responses were observed in 2 out of 3 mice with no measurable tumors on treatment day 26. After 24 and 48 hours, accumulation of VIP716 (ie, payload; “metabolite”) was observed in the tumors but not in plasma.
- KSP inhibition resulted in mitotic arrest and the formation of characteristic monopolar spindles (monoasters). VIP924 treatment produced higher levels and longer duration of monoaster formation in a lymphoma cell line compared to the permeable, small molecule KSPi, ispinesib.

The poster can be accessed on the presentations section of the Vincerx website.

About Vincerx Pharma, Inc.
Vincerx Pharma, Inc. (Vincerx) is a clinical-stage biopharmaceutical company committed to developing differentiated and novel therapies to address the unmet medical needs of patients with cancer. Vincerx has assembled a seasoned management team with a proven track record of successful oncology drug development, approvals, and value creation. The company's diverse pipeline consists of enitociclib, currently in Phase 1, and a proprietary modular bioconjugation platform, which includes a small molecule drug-conjugate, VIP236, in Phase 1, and preclinical next-generation antibody drug conjugates, VIP943 and VIP924.

Vincerx is based in Palo Alto, Calif., and has a research facility in Monheim, Germany. For more information, please visit www.vincerx.com.

Cautionary Statement
This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended, that are intended to be covered by the "safe harbor" created by those sections. Forward-looking statements, which are based on certain assumptions and describe future plans, strategies, expectations and events, can generally be identified by the use of forward-looking terms such as "believe," "expect," "may," "will," "should," "would," "could," "suggest," "seek," "intend," "plan," "goal," "potential," "on-target," "on track," "project," "estimate," "anticipate," or other comparable terms. All statements other than statements of historical facts included in this press release are forward-looking statements. Forward-looking statements include, but are not limited to: Vincerx's business model, pipeline, strategy, timeline, product candidates and attributes, and preclinical and clinical development, timing, and results. Forward-looking statements are neither historical facts nor assurances of future performance or events. Instead, they are based only on current beliefs, expectations and assumptions regarding future business developments, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Forward-looking statements are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control.

Actual results, conditions and events may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements. Important factors that could cause actual results, conditions, and events to differ materially from those indicated in the forward-looking statements include, but are not limited to: general economic, financial, legal, political, and business conditions; the potential effects of health epidemics and pandemics, including COVID-19; risks associated with preclinical or clinical development and trials, including those conducted prior to Vincerx's in-licensing; failure to realize the benefits of Vincerx's license agreement with Bayer; risks related to the rollout of Vincerx's business and the timing of expected business milestones; changes in the assumptions underlying Vincerx's expectations regarding its future business or business model; Vincerx's ability to develop and commercialize product candidates; Vincerx's capital requirements and availability and uses of capital; and the risks and uncertainties set forth in Forms 10-K, 10-Q, and 8-K most recently filed with or furnished to the SEC by Vincerx. Forward-looking statements speak only as of the date hereof, and Vincerx disclaims any obligation to update any forward-looking statements.

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