ENDOCYTE

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Endocyte Presents Data at the 2017 CAR-TCR Summit Further Demonstrating the Ability to Manage Cytokine Release Syndrome Related to CAR T-Cell Therapy

- Poster further demonstrates the potential of Endocyte's SMDC CAR-T platform to more safely regulate CAR-T therapy for solid tumors -

- Unwanted toxicities may be controlled through the administration of approved agents -

WEST LAFAYETTE, Ind., Sept. 06, 2017 (GLOBE NEWSWIRE) -- Endocyte, Inc. (NASDAQ:ECYT), a leader in developing targeted small molecule drug conjugates (SMDCs) and companion imaging agents for personalized therapy, today announced in a poster session the presentation of new research from investigators at the company on the application of Endocyte's SMDC technology in a chimeric antigen receptor (CAR) therapy setting (Poster #5 Targeting a universal CAR-T cell for effective anti-tumor activity and enhanced control using bi-specific small molecule adaptors) at the 2017 CAR-TCR Summit, in Boston, MA.

"The clinical success and recent regulatory approval of the first CAR T-cell therapy has shown the efficacy of CAR T-cell technologies in hematological malignancies and the potential promise of the treatment in solid tumors as well. However, these therapies remain limited in their potential use due to hard to manage, clinically significant toxicities, specifically cytokine release syndrome (CRS). The data presented demonstrate the potential of Endocyte's targeted bi-specific SMDC adaptors to improve upon the safety of current CAR T-cell approaches," said Mike Sherman, president and CEO at Endocyte. "This is particularly relevant as we advance our CAR-T program in solid tumors, including the previously announced clinical evaluation of our program in osteosarcoma being led by Dr. Michael Jensen of Seattle Children's Research Institute."

Endocyte's clinical plan includes genetically engineering a patient's autologous T-Cells to express receptors that recognize fluorescein. Once these T-Cells are infused back into the patient, Endocyte researchers will then introduce its bi-specific adaptor molecules, which are constructed with both a fluorescein molecule and a tumor-homing molecule (e.g. folate) to precisely tether a universal CAR T-cell to a cancer cell. This approach causes local CAR T-cell activation within the tumor, followed by cancer cell death. The current presentation discloses an advancement of Endocyte's method showing the application of specific blocking agents to control undesirable toxicity that often accompanies CAR-T therapy, including CRS, while simultaneously offering the potential to target multiple proteins on the diseased cell (folate, PSMA, NK1R, et al). Strategies are revealed for regulating cytokine storms, including: simple interruption or less frequent administration of the bi-specific adaptor, and injection of untethered folate or sodium fluorescein to rapidly (within hours) displace or block the bi-specific adaptor from bridging the cancer and CAR T-cells. Since the circulation half-life of most bi-specific adaptors is approximately 30 minutes, unwanted toxicity from CAR T-cell induced cytokine storms can be either pre-emptively prevented or rapidly suppressed following their emergence.

"Our pre-clinical data clearly show that a targeted bi-specific adaptor approach can effectively be used to more safely regulate CAR-T therapy for solid tumors," said Chris Leamon, Ph.D., vice president of research at Endocyte. "Knowing the unwanted toxicity can be controlled by administering clinically-approved agents is potentially a powerful advantage."

About Endocyte's SMDC Bi-Specific Adaptors

Endocyte's SMDC bi-specific adaptors represent a novel approach that makes possible the engineering of a single universal CAR T-cell, designed to bind with high affinity to FITC. This universal CAR T-cell can be specifically directed to cancer cells through the administration of a tumor targeted FITC-containing SMDC, known as a bi-specific adaptor that acts to bridge the universal CAR T-cell with the cancer cells to cause localized T-cell activation. This approach has been shown pre-clinically to address three key CAR T-cell issues by: (i) avoiding hyper-activation of CAR T-cells leading to a cytokine storm, (ii) enabling termination of CAR T-cell activity upon eradication of the tumor, and (iii) potentially enabling elimination of all cancer cells in heterogeneous solid tumors. In March 2017, Endocyte entered into a research collaboration with Seattle Children's Research Institute and Dr. Michael Jensen for the development of Endocyte's SMDC platform in CAR T-cell immunotherapy setting through the use of Endocyte's proprietary SMDC bi-specific adaptor molecules.

About Endocyte

Endocyte is a biopharmaceutical company and leader in developing targeted therapies for the treatment of cancer and other serious diseases. Endocyte uses its proprietary drug conjugation technology to create novel SMDCs and companion

imaging agents for personalized targeted therapies. The company's SMDCs actively target receptors that are over-expressed on diseased cells, relative to healthy cells. This targeted approach is designed to enable the treatment of patients with highly active drugs at greater doses, delivered more frequently and over longer periods of time than would be possible with the untargeted drug alone. The companion imaging agents are designed to identify patients whose disease over-expresses the target of the therapy and who are therefore more likely to benefit from treatment. For additional information, please visit Endocyte's website at www.endocyte.com.

Endocyte Forward-Looking Statement

Certain of the statements made in this press release are forward looking, such as those relating to the company's development programs and upcoming milestones. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. Factors that may cause such a difference include risks that the company may experience delays in the completion of its clinical trials (whether caused by competition, adverse events, patient enrollment rates, shortage of clinical trial materials, regulatory issues or other factors); risks that data from its clinical trials may not be indicative of subsequent clinical trial results; risks related to the safety and efficacy of the company's product candidates; risks that early stage preclinical data may not be indicative of subsequent data when expanded to additional preclinical models or to subsequent clinical data; risks that evolving competitive activity and intellectual property landscape may impair the company's ability to capture value for the technology; estimates of the potential markets for its product candidates; estimates of the capacity of manufacturing and other facilities required to support its product candidates; projected cash needs; and expected future revenues, operations, expenditures and cash position. More information about the risks and uncertainties faced by Endocyte, Inc. is contained in the company's periodic reports filed with the Securities and Exchange Commission. Endocyte, Inc. disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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