

December 13, 2019



Cellecstar Presents Poster at the American Association for Cancer Research (AACR) San Antonio Breast Cancer Symposium

Efficacy established in 4th class of molecules utilizing Phospholipid Ether Vehicle

FLORHAM PARK, N.J., Dec. 13, 2019 (GLOBE NEWSWIRE) -- **Cellecstar Biosciences, Inc. (NASDAQ: CLRB)**, a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of drugs for the treatment of cancer, today announced Jarrod Longcor, chief business officer of Cellecstar, presented a poster at the AACR San Antonio Breast Cancer Symposium in San Antonio, TX.

The poster, entitled: *“Preclinical evaluation of a novel phospholipid drug conjugate, CLR 2000045 with a combretastatin A-4 analogue for improved breast cancer therapy,”* featured data demonstrating potent *in vivo* activity in multiple animal models of breast cancer, including a model of triple negative breast cancer. Multiple doses of CLR 2000045 resulted in a statistically significant reduction in tumor volume ($p < 0.05$ and 0.01 respectively) and survival ($p < 0.05$ and 0.001 respectively) in the HCC70, triple negative breast cancer model as compared to vehicle control. In a separate study, the compound displayed comparable activity to paclitaxel in an initial screening model of metastatic breast cancer and the data showed that all doses of CLR 2000045 were well tolerated in both models.

“The data further demonstrate that PDCs are an exciting and novel class of targeted oncology agents with potential in a wide variety of tumor types,” said Jarrod Longcor, chief business officer of Cellecstar. “We have validated targeted delivery to tumor cells and shown efficacy in multiple cancer types utilizing our phospholipid ether delivery vehicle with four separate classes of molecules. These data demonstrate the unique potential of our novel cancer targeting platform.”

About Phospholipid Drug Conjugates™

Cellecstar's product candidates are built upon a patented delivery and retention platform that utilizes optimized phospholipid ether-drug conjugates (PDCs™) to target cancer cells. The PDC platform selectively delivers diverse oncologic payloads to cancerous cells and cancer stem cells, including hematologic cancers and solid tumors. This selective delivery allows the payloads' therapeutic window to be modified, which may maintain or enhance drug potency while reducing the number and severity of adverse events. This platform takes advantage of a metabolic pathway utilized by all tumor cell types in all cell cycle stages. Compared with other targeted delivery platforms, the PDC platform's mechanism of entry does not rely upon specific cell surface epitopes or antigens. In addition, PDCs can be conjugated to molecules in numerous ways, thereby increasing the types of molecules

selectively delivered. Collectar believes the PDC platform holds potential for the discovery and development of the next generation of cancer-targeting agents.

About Collectar Biosciences, Inc.

Collectar Biosciences is focused on the discovery, development and commercialization of drugs for the treatment of cancer. The company is developing proprietary drugs independently and through research and development (R&D) collaborations. The company's core objective is to leverage its proprietary Phospholipid Drug Conjugate™ (PDC) delivery platform to develop PDCs that specifically target cancer cells, delivering improved efficacy and better safety as a result of fewer off-target effects. The company's PDC platform possesses the potential for the discovery and development of the next-generation of cancer-targeting treatments, and it plans to develop PDCs independently and through research and development collaborations.

The company's lead PDC therapeutic, CLR 131, is currently in three clinical studies – a Phase 2 study, and two Phase 1 studies. The Phase 2 clinical study (CLOVER-1) is in relapsed/refractory (R/R) B-cell malignancies, including multiple myeloma (MM), chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL), lymphoplasmacytic lymphoma (LPL), marginal zone lymphoma (MZL), mantle cell lymphoma (MCL), and diffuse large B-cell lymphoma (DLBCL). The company is also conducting a Phase 1 dose escalation study in patients with R/R multiple myeloma (MM) and a Phase 1 study in pediatric solid tumors and lymphoma.

The company's product pipeline also includes one preclinical PDC chemotherapeutic program (CLR 1900) and several partnered PDC assets.

For more information, please visit www.collectar.com or join the conversation by liking and following us on our social media channels: Twitter, LinkedIn, and Facebook.

Forward-Looking Statement Disclaimer

This news release contains forward-looking statements. You can identify these statements by our use of words such as "may", "expect", "believe", "anticipate", "intend", "could", "estimate", "continue", "plans", or their negatives or cognates. These statements are only estimates and predictions and are subject to known and unknown risks and uncertainties that may cause actual future experience and results to differ materially from the statements made. These statements are based on our current beliefs and expectations as to such future outcomes. Drug discovery and development involve a high degree of risk. Factors that might cause such a material difference include, among others, uncertainties related to the ability to raise additional capital, uncertainties related to the disruptions at our sole source supplier of CLR 131, the ability to attract and retain partners for our technologies, the identification of lead compounds, the successful preclinical development thereof, the completion of clinical trials, the FDA review process and other government regulation, the volatile market for priority review vouchers, our pharmaceutical collaborators' ability to successfully develop and commercialize drug candidates, competition from other pharmaceutical companies, product pricing and third-party reimbursement. A complete description of risks and uncertainties related to our business is contained in our periodic reports filed with the Securities and Exchange Commission including our Form 10-K for the year ended December 31, 2018 and Form 10-Q for the quarters ended March 31, 2019, June 30, 2019 and September 30, 2019. These forward-looking statements are made only as of the date

hereof, and we disclaim any obligation to update any such forward-looking statements.

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