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Cellecstar Biosciences Announces Presentation of Data on CLR 12120 Series of Targeted Alpha-Emitting Therapies at the 13th Annual World ADC Conference

Preclinical data demonstrate ability to deliver targeted alpha-emitting isotopes to malignant cells and therapeutic efficacy

FLORHAM PARK, N.J., Nov. 21, 2022 (GLOBE NEWSWIRE) -- Cellecstar Biosciences, Inc. (NASDAQ: CLRB), a late-stage clinical biopharmaceutical company focused on the discovery, development and commercialization of drugs for the treatment of cancer, today announced the presentation of preclinical data at the 13th Annual World ADC Conference supporting development of CLR 12120 series of targeted alpha therapies (TATs). The data demonstrate the versatility of the phospholipid ether (PLE) targeting platform and highlight the potential of the company's alpha emitting precision medicines.

The presentation entitled: "*Novel Conjugates – Radiotherapies*," given by Cellecstar's Chief Operating Officer, Jarrod Longcor, reports data from multiple preclinical studies of the CLR 12120 series, a series of TAT drug candidates designed to target and deliver either actinium-225, lead-212, or astatine-211 to cancer cells. Results demonstrated high tumor delivery with low off-target uptake of the CLR 12120 compounds when administered as monotherapies. Further, the mouse model data showed therapeutic efficacy of all three CLR 12120 candidates at both single and multiple doses in preclinical pancreatic and triple negative breast cancer xenograft models.

The targeting mechanism for the CLR 12120 series is based upon the company's proprietary PLE delivery platform, which targets unique changes in the cancerous cell membranes versus normal/healthy cell membranes. The membrane of tumor cells are differentiated from normal cell membranes by unique microdomains that are present due to the increased metabolic needs of the cancer cells allowing for rapid, uncontrolled growth. These changes provide a novel and unique method to provide precision targeted delivery of various anticancer therapies to tumors.

"The data from our CLR 12120 series is highly encouraging and further validates the payload versatility and precision targeting of our PLE delivery platform," said Jarrod Longcor, Chief Operating Officer. "The data confirm the ability of the PLEs to deliver nearly any radioisotopes including alpha- and beta-emitters directly to tumor cells. Furthermore, the efficacy data demonstrate the potential to treat highly aggressive and difficult to treat cancers and provides additional future clinical development considerations."

James Caruso, president and CEO of Cellecstar added, "We believe the PLE platform is one of the most versatile targeted cancer delivery platforms with the potential to similarly deliver various payloads to both solid and liquid tumors. To support future clinical development and

partnering activities we have established a broad U.S. and international intellectual property rights portfolio around our PLE technology providing the company with freedom to operate across a broad range of treatment modalities.”

About Cellectar Biosciences, Inc.

Cellectar Biosciences is focused on the discovery and development of drugs for the treatment of cancer. The company is developing proprietary drugs independently and through research and development 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 to deliver 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 product pipeline includes iopofosine, a small-molecule PDC designed to provide targeted delivery of iodine-131 (radioisotope), proprietary preclinical PDC chemotherapeutic programs and multiple partnered PDC assets. The company is currently investigating iopofosine in a global, open-label, pivotal expansion cohort in relapsed or refractory WM patients who have received at least two prior lines of therapy, including those who have failed or had a suboptimal response to Bruton tyrosine kinase inhibitors. The WM cohort will enroll up to 50 patients to evaluate the efficacy and safety of iopofosine for marketing approval. The company is also evaluating iopofosine in highly refractory multiple myeloma patients in its Phase 2 CLOVER-1 study and relapsed/refractory pediatric cancer patients with sarcomas or brain tumors in the Phase 1 CLOVER-2 study.

The Phase 1 pediatric study is an open-label, sequential-group, dose-escalation study to evaluate the safety and tolerability of iopofosine in children and adolescents with relapsed or refractory cancers, including malignant brain tumors, neuroblastoma, sarcomas, and lymphomas (including Hodgkin's lymphoma). The Phase 1 study is being conducted internationally at seven leading pediatric cancer centers.

The company has established exclusivity on a broad U.S. and international intellectual property rights portfolio around its proprietary cancer-targeting PLE technology platform, including iopofosine and its PDC programs.

In addition to the company's exclusivity to iopofosine and its phospholipid ethers conjugated to small molecules, peptides, and oligos, the company now has non-exclusive rights to the use of the phospholipid ether platform when conjugating with a chelator to bind select metal radioisotopes.

For more information, please visit www.cellectar.com and www.wmclinicaltrial.com or join the conversation by liking and following us on the company's 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 including our expectations of the impact of the COVID-19 pandemic. 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 iopofosine, the ability to attract and retain partners for our technologies, the identification of lead compounds, the successful preclinical development thereof, patient enrollment and the completion of clinical studies, the FDA review process and other government regulation, our ability to maintain orphan drug designation in the United States for iopofosine, 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, 2021, our Form 10-Q for the quarter ended March 31, 2022, our Form 10-Q for the quarter ended June 30, 2022, and our Form 10-Q for the quarter ended September 30, 2022. 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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