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Peer-Reviewed Glioma Surgery Study With Cellecstar Biosciences Fluorescence Cancer-Targeting Agents Chosen for the Cover of Neurosurgery

MADISON, Wis., Jan. 22, 2015 (GLOBE NEWSWIRE) -- Cellecstar Biosciences, Inc. (Nasdaq:CLRB), a clinical stage biopharmaceutical company developing innovative agents for the detection and treatment of cancer, announced publication of the first peer-reviewed proof-of-principle study of a new class of fluorescent alkylphosphocholine analogs for fluorescence-guided glioma surgery in *Neurosurgery*, official journal of the Congress of Neurological Surgeons – the largest neurosurgical society in the world. This study is featured on the cover of the February 2015 issue, and demonstrates that the fluorescent cancer-selective CLR1501 and CLR1502 agents successfully provide visualization of glioma cancer cells with high fidelity, and suggest their practical and promising potential to optimize tumor surgery.

Cancer surgeons are challenged to better discriminate cancer cells from normal tissue, and are exploring the use of fluorescence agents to optimize tumor visualization and maximize safe surgical resection. Using its highly selective cancer-targeting phospholipid ether (PLE) technology, Cellecstar has developed CLR1501 and CLR1502 as novel tumor-selective fluorescent agents to illuminate cancer cells, in vitro and in vivo respectively, thereby distinguishing cancer from normal tissue during diagnostic, staging, debulking and curative cancer surgeries.

The study's objectives were to confirm CLR1501 and CLR1502 cancer-cell selectivity in glioblastoma models, and to quantify their fluorescent signals that distinguish tumor from normal brain in comparison to 5-ALA, an agent commercially available in the European Union for image-guided surgery but not approved for routine use in the United States. This study showed that the CLR1501 tumor-specific fluorescence signal is similar to 5-ALA, and that CLR1502 has a superior tumor-to-brain fluorescence ratio.

"There is compelling evidence from a growing number of peer-reviewed studies that demonstrate the ability of Cellecstar PLE agents to selectively target cancer cells," said senior author, John S. Kuo, MD, PhD, Associate Professor of Neurological Surgery, Director of the Comprehensive Brain Tumor Program and Chair of the Carbone Cancer Center CNS Tumors Group at the University of Wisconsin-Madison. "Using fluorescent Cellecstar PLE agents for real-time, intraoperative discrimination of cancer from adjacent normal tissue promises to optimize tumor removal and preserve critical normal tissue. Since Cellecstar PLE technology successfully targets many different cancers, CLR1502 has great potential to significantly advance tumor fluorescence-guided surgery and improve clinical outcomes for many surgically managed cancers."

Collectar plans to initiate a Phase I proof-of-principle clinical trial of CLR1502 in patients undergoing breast cancer surgery later in 2015.

About Collectar Biosciences, Inc.

Collectar Biosciences is developing agents to detect, treat and monitor a broad spectrum of cancers. Using a novel phospholipid ether (PLE) analog platform technology as a targeted delivery and retention vehicle, Collectar's compounds are designed to be selectively taken up and retained in cancer cells including cancer stem cells. With the ability to attach both imaging and therapeutic agents to its proprietary delivery platform, Collectar has developed a portfolio of product candidates engineered to leverage the unique characteristics of cancer cells to "find, treat and follow" malignancies in a highly selective way. I-124-CLR1404 is a small-molecule, broad-spectrum, cancer-targeted PET imaging agent currently being evaluated in a Phase II glioblastoma imaging trial. Additionally, multiple investigator-sponsored Phase I/II clinical trials are ongoing across 11 solid tumor indications. I-131-CLR1404 is a small-molecule, broad-spectrum, cancer-targeted molecular radiotherapeutic that delivers cytotoxic radiation directly and selectively to cancer cells including cancer stem cells. A Phase Ib dose-escalation trial of I-131-CLR1404 in patients with advanced solid tumors was completed in the first quarter of 2014 and results presented at the American Society of Clinical Oncology (ASCO) 2014 Annual Meeting. CLR1502 is a preclinical, cancer-targeted, non-radioactive optical imaging agent for intraoperative tumor margin illumination and non-invasive tumor imaging. For additional information please visit www.collectar.com

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 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, 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, 2013. 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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