



Cellectar and Orano Med Announce Collaboration to Develop New Phospholipid Drug Conjugate

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MADISON, Wis. and COURBEVOIE, France, Aug. 01, 2018 (GLOBE NEWSWIRE) -- Cellectar Biosciences (Nasdaq:CLRB), a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of drugs for the treatment of cancer, and Orano Med (formerly AREVA Med) a subsidiary of Orano, a nuclear biotech company developing innovative therapies in oncology, today announced that the two companies have entered into an agreement to combine certain proprietary technologies from each company to create a novel oncologic therapy. The collaboration will focus on the development of novel phospholipid drug conjugates (PDC™) utilizing Orano Med's unique alpha emitter, lead-212 (²¹²Pb), conjugated to Cellectar's phospholipid ether (PLE). The companies intend to evaluate the new PDC in up to three oncology indications.

"We believe that the combination of Cellectar's targeted delivery with Orano Med's powerful alpha emitter offers the potential to create a novel and highly potent cancer therapy," said James Caruso, chief executive officer of Cellectar Biosciences. "This collaboration is an ideal strategic fit and provides an excellent opportunity to expand our radiotherapeutic portfolio beyond CLR 131, a highly potent beta emitter, and establish one of the most complete oncology-focused radiotherapeutic portfolios."

Cellectar's proprietary PLE and PLE analogs provide targeted delivery of various molecules, including radioisotopes, to malignant tumor cells with up to 30-fold more payload delivered to the tumor versus normal tissues. Orano Med's ²¹²Pb is a unique alpha emitter that provides high energy delivery over a shorter distance than other radioisotopes. The higher energy associated with alpha particles causes non-repairable double stranded DNA breaks. As a result, enhanced tumor targeting of the construct may allow the ²¹²Pb to provide greater efficacy at lower doses with less side effects.

Orano Med has partnered ²¹²Pb with other companies to create a broad pipeline of tumor targeting ²¹²Pb therapies. These other collaborations are using diverse biological targeting vectors or pursuing indications separate from those planned in this collaboration. Many of these approaches utilize antibodies or peptides; the most advanced of these approaches has recently entered a Phase 1 clinical trial.

Cellectar and Orano Med believe that the PLE conjugated to ²¹²Pb could be an ideal drug candidate and provide improved anti-cancer effects beyond those seen with some of the other delivery technologies.

"This collaboration with Cellectar is an exciting opportunity for Orano Med. Our ²¹²Pb is a powerful radioactive isotope that at low doses kills cancer cells and has limited impact on nearby healthy cells. We believe that ²¹²Pb conjugated to Cellectar's PLE has great potential to improve patient outcomes by having a better efficacy and safety profile than other technologies," said Julien Dodet, CEO of Orano Med.

Under the terms of the agreement, early preclinical costs will be shared equally between the organizations with both parties having an option to advance and commercialize the PDC alone or in collaboration with each other. The option is exercisable after establishment of early proof of concept data.

About Phospholipid Drug Conjugates™

Cellectar'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. Cellectar believes the PDC platform holds potential for the discovery and development of the next generation of cancer-targeting agents.

About ²¹²Pb

²¹²Pb is a promising agent for use in the field of alpha particle radiotherapy that has been tested in clinical trials. Alpha particle emitting radiotherapies, like ²¹²Pb, cause double stranded DNA breaks by releasing high energy particles over a short distance. ²¹²Pb represents one of the more powerful alpha emitters and has a half-life of 10.6 hours.

About Cellectar Biosciences, Inc.

Cellectar Biosciences is focused on the discovery, development and commercialization of drugs for the treatment of cancer. The company plans to develop proprietary drugs independently and through research and development (R&D) collaborations. The core drug development strategy is to leverage our PDC platform to develop therapeutics that specifically target treatment to cancer cells. Through R&D collaborations, the company's strategy is to generate near-term capital, supplement internal resources, gain access to novel molecules or payloads, accelerate product candidate development and broaden our proprietary and partnered product pipelines.

The company's lead PDC therapeutic, CLR 131, is in a Phase 1 clinical study in patients with relapsed or refractory (R/R) MM and a Phase 2 clinical study in R/R MM and a range of B-cell malignancies. The company is currently initiating a Phase 1 study with CLR 131 in pediatric solid tumors and lymphoma, and is planning a second Phase 1 study in combination with external beam radiation for head and neck cancer. The company's product pipeline also includes two preclinical PDC chemotherapeutic programs (CLR 1700 and 1900) and partnered assets include PDCs from multiple R&D collaborations.

For more information please visit www.cellectar.com.

About Orano Med

Orano Med (formerly AREVA Med) is a nuclear medicine biotech company developing innovative therapies in oncology. Orano Med has developed new processes for producing lead-212 (^{212}Pb), a rare radioactive isotope used in Targeted Alpha Therapy (TAT), an innovative and promising approach of nuclear medicine allowing recognizing and destroying cancer cells while limiting the impact on nearby healthy cells. With its partners, Orano Med pursues the development of effective therapies to address patient needs. Orano Med is a subsidiary of Orano.

More information about Orano Med: www.oranomed.com.

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 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, 2017. 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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