



ONCONOVA THERAPEUTICS

Collectar Biosciences Enters into Strategic Collaboration with Onconova Therapeutics to Develop New Phospholipid Drug Conjugates

September 21, 2017

MADISON, Wis., Sept. 21, 2017 (GLOBE NEWSWIRE) -- Collectar Biosciences, Inc. (Nasdaq:CLRB), an oncology-focused, clinical stage biotechnology company (the "company"), and Onconova Therapeutics (Nasdaq:ONTX) today announced that they have entered into a strategic collaboration to develop new phospholipid drug conjugates (PDCs) combining Collectar's patented phospholipid ether delivery platform with select proprietary compounds or payloads from Onconova's early stage product pipeline. Newtown, Pa.-based Onconova is a late-stage biopharmaceutical company focused on the discovery and development of novel small molecule drug candidates to treat cancer.

"Access to novel anti-tumor payloads is key to leveraging our next generation PDC delivery platform technology for the discovery of novel, proprietary targeted anti-cancer therapeutics," said Jim Caruso, president and CEO of Collectar Biosciences. "Onconova is an established player in developing small molecule anti-cancer compounds. Their unique early stage assets, development experience and ability to successfully advance compounds into Phase 3 clinical trials makes them an excellent partner for Collectar."

Under the terms of the collaboration, Onconova will provide Collectar with several compounds, including some from the family of molecules that contains Briciclib, which is an EIF4E targeting small molecule with early Phase 1 data. Collectar will leverage its expertise in early development and chemical conjugation to link the molecules to its phospholipid ether (PDC platform) to create new, more precisely targeted antitumor agents. Both companies will have the option to advance the development of any of the newly conjugated PDC molecules. Financial terms of the collaboration have not been disclosed.

"We are focused on optimizing the delivery of our therapeutic compounds in the battle against Myelodysplastic Syndrome and a variety of cancers. As such, we are excited to collaborate with Collectar and leverage their PDC platform, which we believe can improve the targeting of our molecules directly to the cancer, in addition to extending the patent coverage of these drug candidates," said Ramesh Kumar, Ph.D., president and CEO of Onconova Therapeutics.

About Phospholipid Drug Conjugates (PDCs)

Collectar's product candidates are built upon its patented cancer cell-targeting delivery and retention platform of optimized phospholipid ether-drug conjugates (PDCs). The company deliberately designed its phospholipid ether (PLE) carrier platform to be coupled with a variety of payloads to facilitate both therapeutic and diagnostic applications. The basis for selective tumor targeting of our PDC compounds lies in the differences between the plasma membranes of cancer cells compared to those of normal cells. Cancer cell membranes are highly enriched in lipid rafts, which are glycolipoprotein microdomains of the plasma membrane of cells that contain high concentrations of cholesterol and sphingolipids, and serve to organize cell surface and intracellular signaling molecules. PDCs have been tested in more than 80 different xenograft models of cancer.

About Collectar Biosciences, Inc.

Collectar Biosciences is developing phospholipid drug conjugates (PDCs) designed to provide cancer targeted delivery of diverse oncologic payloads to a broad range of cancers and cancer stem cells. Collectar's PDC platform is based on the company's proprietary phospholipid ether analogs. These novel small-molecules have demonstrated highly selective uptake and retention in a broad range of cancers. Collectar's PDC pipeline includes product candidates for cancer therapy and cancer diagnostic imaging. The company's lead therapeutic PDC, CLR 131, utilizes iodine-131, a cytotoxic radioisotope, as its payload. CLR 131 has been designated as an orphan drug by the US FDA and is currently being evaluated in a Phase 1 clinical study in patients with relapsed or refractory multiple myeloma and a Phase 2 clinical study to assess efficacy in a range of B-cell malignancies.

The company is also developing proprietary PDCs for targeted delivery of chemotherapeutics and has several preclinical stage product candidates, and plans to expand its PDC chemotherapeutic pipeline through both in-house and collaborative R&D efforts. For more information please visit www.collectar.com.

About Onconova Therapeutics, Inc.

Onconova Therapeutics, Inc. is a Phase 3-stage biopharmaceutical company focused on discovering and developing novel small molecule drug candidates to treat cancer, with a primary focus on Myelodysplastic Syndromes (MDS). Rigosertib, Onconova's lead

candidate, is a proprietary Phase 3 small molecule agent, which the Company believes blocks cellular signaling by targeting RAS effector pathways. Using a proprietary chemistry platform, Onconova has created a pipeline of targeted agents designed to work against specific cellular pathways that are important in cancer cells, while causing minimal damage to normal cells. Onconova has three product candidates in the clinical stage and several pre-clinical programs. Advanced clinical trials with the Company's lead compound, rigosertib, are aimed at what the Company believes are unmet medical needs of patients with MDS. For more information, please visit <http://www.onconova.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, 2016. These forward-looking statements are made only as of the date hereof, and we disclaim any obligation to update any such forward-looking statements.

CONTACT for Collectar:

Jules Abraham
JQA Partners, Inc.
917-885-7378
jabraham@jqapartners.com

CONTACTS for Onconova Therapeutics

General:
<http://www.onconova.com/contact>

Investor Relations:
Katja Buhner
MBS Value Partners
212-661-7004
Katja.Buhner@mbsvalue.com