

Artelo Biosciences Announces NCI Grant of \$4.2 Million to Stony Brook University to Advance FABP5 Inhibitor Cancer Program

FABP5 platform under exclusive license to Artelo Biosciences

NCI support provides further validation of next-generation target for cancer therapeutics

LA JOLLA, Calif., Feb. 03, 2020 (GLOBE NEWSWIRE) -- Artelo Biosciences, Inc. (NASDAQ: ARTL), a clinical stage biopharmaceutical company focused on the development of therapeutics that modulate the endocannabinoid system, today announced that the National Cancer Institute (NCI) has awarded Stony Brook University a \$4.2 million grant to advance the development of its fatty acid binding protein 5 (FABP5) inhibitor platform. This platform is under exclusive license to Artelo as a potential breakthrough cancer treatment. The five-year grant is intended to support research at Stony Brook University's Institute of Chemical Biology and Drug Discovery (ICB&DD), in collaboration with Cold Spring Harbor Laboratory and Artelo Biosciences.

FABP5 is an intracellular protein that serves as a carrier for lipids including endocannabinoids and fatty acids. Inhibition of FABP5 is believed to suppress the growth and migration of cancers, including breast and prostate cancers. The original work of Dr. Iwao Ojima and Dr. Martin Kaczocha at ICB&DD and collaboration with Dr. Lloyd Trotman at Cold Spring Harbor Laboratory, led to a paper in The Prostate that showed novel FABP5 inhibitors developed by the ICB&DD team exhibited significant cytotoxicity against highly drug-resistant metastatic prostate cancer cells. FABP5 also enhanced the antitumor effects of taxane drugs in animal models.

Taxanes, such as docetaxel or cabazitaxel are commonly used to treat metastatic prostate cancer. However, tumors often build up resistance to such drugs, and patients frequently experience adverse events that result in their inability to complete treatment. FABP5 inhibitors combined with docetaxel or cabazitaxel produce synergistic cytotoxicity in numerous prostate cancer cell lines in vitro. The ability of these drugs to synergize could lead to new combination therapies with enhanced tumor-suppressive efficacy, thereby treating advanced diseases more effectively and minimizing adverse effects.

"In our research, neither docetaxel or cabazitaxel alone was able to eradicate prostate cancer cells in vitro, while combinations of these taxanes with FABP5 inhibitors resulted in complete prostate cell death with synergism at very low concentrations of taxanes," said Dr. Ojima, leader of this project.

"While the FABP5 inhibitors produced limited or no cell cytotoxicity in noncancerous cells, they achieved near-complete cell death in the prostate cancer cell lines used in our study,

which suggests the FABP5 inhibitors would have fewer side-effects compared with the current taxane steroid-based therapy," added Dr. Kaczocha and co-leader of the collaborative team.

"Modulating lipid signaling has the potential to be the next revolution in cancer therapeutics," said Gregory D. Gorgas, Artelo Bioscience's President and Chief Executive Officer. "We believe this grant is significant validation of our platform and supports the next steps in our collaborative efforts to develop FABP5 inhibitors as potential treatments for various cancers, as well other possible applications including inflammation and pain. We truly value our collaboration with Stony Brook University and Cold Spring Harbor Laboratory, and believe this grant further illustrates our team's success in rapidly advancing this program from an initial concept."

Under the grant, the research team will develop and identify the preferred FABP5 inhibitors for potency and selectivity and assess the efficacy of the selected drug candidates in preclinical models, both as single agents and in combination with FDA-approved drugs.

About Stony Brook University

Stony Brook University, widely regarded as a State University of New York (SUNY) flagship, is going beyond the expectations of what today's public universities can accomplish. Since its founding in 1957, this young university has grown to become one of only four University Center campuses in the SUNY system with over 26,000 students, more than 2,700 faculty members and 18 NCAA Division I athletic programs. SUNY's faculty have earned numerous prestigious awards, including the Nobel Prize, Pulitzer Prize, Indianapolis Prize for animal conservation, Abel Prize and the inaugural Breakthrough Prize in Mathematics. The University offers students an elite education with an outstanding return on investment: U.S. News & World Report ranks Stony Brook among the top 40 public universities in the nation. Its membership in the Association of American Universities (AAU) places Stony Brook among the top 62 research institutions in North America. As part of the management team of Brookhaven National Laboratory, the University joins a prestigious group of universities that have a role in running federal R&D labs. Stony Brook University fuels Long island's economic growth. Its impact on the Long island economy amounts to \$7.38 billion in increased output. Our state, country and world demand ambitious ideas, imaginative solutions and exceptional leadership to forge a better future for all. The students, alumni, researchers and faculty of Stony Brook University are prepared to meet this challenge.

About Artelo Biosciences

Artelo Biosciences, Inc. is a San Diego-based biopharmaceutical company dedicated to the development and commercialization of proprietary therapeutics targeting the endocannabinoid system. Artelo is rapidly advancing a portfolio of broadly applicable product candidates designed to address significant unmet needs in multiple diseases and conditions, including anorexia, cancer, pain, and inflammation. Led by proven biopharmaceutical executives collaborating with highly respected researchers and technology experts, the company applies leading edge scientific, regulatory, and commercial discipline to develop high-impact therapies.

More information is available at www.artelobio.com and Twitter: @ArteloBio.

Forward Looking Statements

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and Private Securities Litigation Reform Act, as amended, including those relating to the Company's product development, clinical and regulatory timelines, market opportunity, competitive position, possible or assumed future results of operations, business strategies, potential growth opportunities and other statement that are predictive in nature. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate and management's current beliefs and assumptions.

These statements may be identified by the use of forward-looking expressions, including, but not limited to, "expect," "anticipate," "intend," "plan," "believe," "estimate," "potential," "predict," "project," "should," "would" and similar expressions and the negatives of those terms. These statements relate to future events or our financial performance and involve known and unknown risks, uncertainties, and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include those set forth in the Company's filings with the Securities and Exchange Commission, including our ability to raise additional capital in the future. Prospective investors are cautioned not to place undue reliance on such forward-looking statements, which speak only as of the date of this press release. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise, except to the extent required by applicable securities laws.

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