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Artelo Biosciences Announces Publication of New Peer-Reviewed Research Demonstrating Protective Properties of ART27.13 Against Muscle Degeneration Caused by Certain Cancers

SOLANA BEACH, Calif., Nov. 09, 2023 (GLOBE NEWSWIRE) -- [Artelo Biosciences, Inc.](#) (**Nasdaq: ARTL**), a clinical-stage pharmaceutical company focused on modulating lipid-signaling pathways to develop treatments for people living with cancer, pain, and neurological conditions, today announced new research published in the peer-reviewed journal [Pharmaceuticals](#). The research article, titled "[Cancer-Cachexia-Induced Human Skeletal Muscle Myotube Degeneration is Prevented via Cannabinoid Receptor 2 Agonism in Vitro](#)," highlights the promising protective properties of the Company's clinical asset, ART27.13, in helping prevent muscle degeneration caused by cancer.

Senior author Dr. Richard K. Porter, Associate Professor at Trinity College Dublin, Ireland, stated, "This groundbreaking research demonstrated ART27.13's ability to protect against muscle degeneration associated with colon and lung cancers. Based on this *in vitro* data, ART27.13 has the potential to protect against muscle wasting, which could result in increased quality of life and may ultimately impact life expectancy for patients suffering from cancer."

Artelo is currently evaluating ART27.13, a dual CB₁/CB₂ receptor agonist, in the Cancer Appetite Recovery Study (CAREs) Phase 2a clinical trial to determine its effect on lean body mass, weight gain, activity levels, and improvement of anorexia in cancer patients. The purpose of this new research was to establish whether ART27.13 may additionally impact muscle degradation, a common debilitating effect of cancer and its treatment. Not only did the research show that ART27.13 protects against muscle wasting in the *in vitro* model, but also shows that the activity was mediated by the CB₂ receptor.

Steven D. Reich, M.D., Chief Medical Officer of Artelo, commented "This *in vitro* data supports our confidence in ART27.13's potential as a supportive care therapy for cancer patients as it may not only increase appetite, but also prevent muscle wasting. We are actively enrolling patients in the trial and look forward to reporting on our continued progress."

Professor Richard K. Porter authored the research paper in collaboration with Professor Saoirse O'Sullivan, Vice President of Translational Sciences at Artelo, Dr. Andrew Yates, Senior Vice President and Chief Scientific Officer of Artelo, together with Dr. John Noone,

Dr. Mary F. Rooney and Dr. Marilena Karavyraki based at the Trinity Biomedical Science Institute (TBSI), Trinity College Dublin, Ireland.

About ART27.13

ART27.13 is a highly potent, peripherally restricted synthetic, dual G-Protein-Coupled Receptor agonist believed to target the cannabinoid receptors CB₁ and CB₂, which has the potential to increase appetite and food intake. Originally developed by AstraZeneca plc, ART27.13 has been evaluated in five Phase 1 clinical studies including over 200 subjects where it has demonstrated a statistically significant and dose-dependent increase in body weight in healthy subjects. Importantly, the changes in body weight were not associated with fluid retention and the distribution of the drug enables systemic metabolic effects while minimizing central nervous system-mediated toxicity. Artelo is advancing ART27.13 as a supportive care therapy for cancer patients suffering from anorexia and weight loss, where the current annual global market is estimated to be valued in excess of \$2 billion.

About CAREs

The Cancer Appetite Recovery Study (CAREs) is a Phase 1b/2a randomized, placebo-controlled trial of the Company's lead clinical program, ART27.13, in patients with cancer anorexia and weight loss. Anorexia, or the lack or loss of appetite, may result from the cancer and/or its treatment with radiation or chemotherapy. It is common for patients with cancer to lose weight. Anorexia and the resulting weight loss can affect a patient's health, often weakening their immune system and causing discomfort and dehydration. A weight loss of more than 5% can predict a poor outcome for cancer patients and a lower response to chemotherapy. The Phase 1b portion of the CAREs study is designed to determine the most effective and safest dose of ART27.13 for dosing in the Phase 2a stage. The Phase 2a portion of the CAREs study is designed to determine estimates of activity of ART27.13 in terms of lean body mass, weight gain, and improvement of anorexia. (ISRCTN registry: <https://www.isrctn.com/ISRCTN15607817>)

About Artelo Biosciences

Artelo Biosciences, Inc. is a clinical stage pharmaceutical company dedicated to the development and commercialization of proprietary therapeutics that modulate lipid-signaling pathways including the endocannabinoid system. Artelo is advancing a portfolio of broadly applicable product candidates designed to address significant unmet needs in multiple diseases and conditions, including anorexia, cancer, anxiety, pain, neuropathy, 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](https://twitter.com/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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