

Artelo Biosciences Reports Positive Preclinical Results for Lead Program in Cancer-Related Cachexia

New Research from Trinity College Dublin Indicates Broader Therapeutic Potential for ART27.13

SOLANA BEACH, Calif., April 13, 2022 (GLOBE NEWSWIRE) -- <u>Artelo Biosciences</u>, <u>Inc.</u> (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 that ART27.13, a peripherally selective G-Protein Coupled Receptor (GPCR) full agonist currently in clinical development for cancer-related anorexia, shows promising pre-clinical results in protecting human muscle cells from cancer-induced muscle degeneration (cachexia) via a CB₂ mediated mechanism of action.

"These are very encouraging data for two important reasons," said Richard Porter, Ph.D., of the School of Biochemistry & Immunology at Trinity College Dublin, Ireland. "For the first time, we have evidence that ART27.13 targets a second mechanism of action, the cannabinoid receptor CB₂, with these positive pre-clinical results. Furthermore, this mechanism of action extends the potential benefit of ART27.13 to treating cachexia in addition to appetite loss and body weight regulation via CB₁ mediated activity."

"These exciting early results demonstrate that ART27.13 is capable of reducing negative effects of chemicals produced by multiple cancers on human muscle fibers," added Saoirse O'Sullivan, Ph.D., Vice President Translational Science, Artelo Biosciences. "We look forward to seeing how these results may translate into the ongoing CAReS study currently in the final stages of enrolling cohort 3 at six clinical trial sites in the United Kingdom and Ireland."

About Cancer-Related Cachexia

Cachexia is a multi-organ, and often irreversible, muscle-wasting syndrome associated with cancer and other serious chronic illnesses. It affects up to 80% of patients with advanced cancer and causes reduced tolerance to cancer therapies, quality of life, and survival rates. Cachexia is an unmet medical need in oncology for which there is no approved therapy.

About ART27.13

ART27.13 is a once-a-day, orally administered, highly potent, peripherally restricted synthetic, dual GPCR agonist believed to target the cannabinoid receptors CB₁/CB₂, which has the potential to increase appetite, food intake and reduce muscle wasting. Originally developed by AstraZeneca plc, ART27.13 has been studied in five Phase 1 clinical studies

including over 200 subjects. In the multiple ascending dose study in 50 patients with back pain who were otherwise healthy, a dose-dependent increase in body weight was observed. Importantly, the changes in body weight apparently 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 the development of ART27.13 as a supportive care therapy for cancer patients suffering from anorexia and weight loss in the Cancer Appetite Recovery Study (CAReS). The current annual global market for the treatment of cancer-related anorexia is estimated to be valued in excess of \$2 billion. More information is available at https://artelobio.com/pipeline/art27-13/

About Artelo Biosciences

Artelo Biosciences, Inc. is a San Diego-based biopharmaceutical company dedicated to the development and commercialization of proprietary therapeutics targeting endogenous signaling pathways including 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, PTSD, 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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