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# Artelo Biosciences Files New Provisional Patent Application Covering ART27.13 for Obesity, Alone and in Combination with GLP-1 Receptor Agonists, Following Unexpected Nonclinical Findings

*As reported, ART27.13 produced approximately 40% weight loss in combination with semaglutide and approximately 20% as monotherapy, comparable to semaglutide, in obese mice over four weeks*

*Application expands Artelo's intellectual property position for ART27.13 into obesity, where J.P. Morgan has projected the global GLP-1 market could reach $200 billion by 2030*

*New findings show the combination further improved oral glucose tolerance and increased bone mineral density, an effect not observed in any other treatment group*

SOLANA BEACH, Calif., Sept. 23, 2026 (GLOBE NEWSWIRE) -- Artelo Biosciences, Inc. **(Nasdaq: ARTL)** ("Artelo" or the "Company"), a clinical-stage pharmaceutical company focused on modulating lipid-signaling pathways to develop treatments for people living with obesity, cancer, pain, dermatologic and neurological conditions, today announced the filing of a provisional patent application covering the use of ART27.13 for the treatment of obesity. The application covers ART27.13 both as a monotherapy and in combination with GLP-1 receptor agonists such as semaglutide, the active ingredient in Ozempic® and Wegovy®.

The filing follows unexpected findings from Artelo's nonclinical DIO-2 study that point to a potentially broader role for ART27.13 in weight and metabolic regulation. The Company is disclosing additional findings from the study today, alongside results reported on September 16, 2026.

As previously reported, ART27.13 monotherapy produced approximately 20% weight loss from baseline over four weeks in obese mice, comparable to semaglutide. In combination with semaglutide, obese mice lost approximately 40% of their baseline body weight. Approximately 80% of the weight lost in ART27.13-treated groups was fat, compared with approximately 70% with semaglutide alone.

The new findings show that the combination suppressed appetite more than semaglutide alone and further improved oral glucose tolerance. Bone mineral density increased in the combination group, an effect not observed in any other treatment group. Semaglutide and ART27.13 each reduced total cholesterol, LDL and HDL to similar extents, with greater

reductions when given together. Liver hypertrophy was reduced across all treatment groups.

“These findings were unexpected and potentially expand the opportunity for ART27.13 well beyond our original hypothesis,” said Gregory D. Gorgas, President and Chief Executive Officer of Artelo Biosciences. “We began studying ART27.13 alongside semaglutide because our published cancer cachexia research with Professor Richard Porter of Trinity College Dublin indicated it helps preserve muscle. We observed substantial weight loss with ART27.13 on its own, an approximate doubling of weight loss in combination with a semaglutide, and a set of metabolic and bone findings we did not anticipate. This application secures an early filing date for that work while we pursue it.”

ART27.13 is a peripherally restricted dual cannabinoid $CB_1$ and $CB_2$ receptor agonist. The Company believes the findings are particularly novel because historical research into cannabinoid signaling for obesity has largely focused on $CB_1$ antagonism. ART27.13 had no observed effect on any measured parameter in lean animals maintained on standard chow, a pattern Artelo believes is consistent with a metabolic regulator profile. Artelo plans to investigate the mechanisms behind these effects, including ART27.13’s potential impact on key pathways and hormones involved in appetite and metabolic regulation.

Rather than competing with GLP-1 therapies, ART27.13 is being evaluated as a potential complement to them, with the aim of improving both the magnitude and the quality of weight loss. ART27.13 enters obesity research with an existing clinical dataset: six completed clinical studies, two ongoing clinical trials, and nearly 300 participants receiving ART27.13 to date.

“Bone and lean mass are drawing growing attention as GLP-1 therapies are used more widely, so seeing bone mineral density increase in the combination group was notable,” added Mr. Gorgas. “The potential to enhance an established GLP-1 therapy while showing meaningful activity as a monotherapy is expected to create a new development path for ART27.13, and we intend to protect it as the science advances.”

**About ART27.13**

Initially developed by AstraZeneca plc, ART27.13 is a dual cannabinoid agonist that has been evaluated in six clinical studies and two ongoing clinical trials with nearly 300 participants. It is being developed as a once-daily oral agent that selectively targets peripheral $CB_1$ and $CB_2$ receptors, enabling systemic metabolic effects while minimizing central nervous system-mediated toxicity.

Artelo is conducting a Phase 2 trial, the Cancer Appetite Recovery Study (CAReS), evaluating ART27.13 as a supportive care therapy for cancer patients with anorexia and weight loss. Patients had to have lost at least 5% of body weight to enroll. In interim data, those titrated to the highest dose (1300 µg) gained an average of 6% of body weight over 12 weeks, while patients on placebo lost an additional ~5%. There is currently no FDA-approved treatment for cancer anorexia cachexia syndrome. ART27.13 is also being evaluated in DREAM, a Phase 2 study in people with glaucoma investigating whether oral daily treatment can lower intraocular pressure.

**About the Diet-Induced Obesity (DIO) Model**

The DIO-2 study evaluated ART27.13 in mice with diet-induced obesity, the standard nonclinical model used across the industry to evaluate GLP-1 receptor agonists and other anti-obesity therapies. Obese mice maintained on a high-fat diet were treated with vehicle, semaglutide (20 nmol/kg) s.c., ART27.13 (2.5 µmol/kg) orally, or semaglutide in combination with ART27.13 under three dosing regimens. Lean mice maintained on standard chow were treated with vehicle or ART27.13 to assess effects in non-obese animals. Body weight and food consumption were measured throughout the four-week treatment period, and body composition was assessed by DEXA and MRI imaging. The findings replicate and extend the results of an initial pilot study (DIO-1) in the same model, in which co-treatment with ART27.13 was observed to improve the weight-loss efficacy when used in combination with semaglutide.



**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, with a diversified pipeline addressing significant unmet needs in obesity, anorexia, cancer, anxiety, dermatologic conditions, pain, and inflammation. Led by an experienced executive team collaborating with world-class researchers and technology partners, Artelo applies rigorous scientific, regulatory, and commercial expertise to maximize stakeholder value. More information is available at www.artelobio.com and X: @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 statements 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 but not limited to: our ability to raise additional capital in the future; the inherent uncertainties of preclinical and clinical research, including the possibility that results observed in nonclinical animal models may not be predictive of, or replicated in, human clinical trials; the preliminary nature of the study results described in this press release, which remain subject to completion of the full analysis; the early stage of our obesity research program; the uncertainty of patent protection and the potential for*

*intellectual property challenges; the fact that a provisional patent application does not itself result in an issued patent, confers no enforceable rights, and must be followed by a non-provisional application within 12 months to preserve its priority date; the highly competitive nature of the pharmaceutical industry, including the GLP-1, obesity and combination therapy markets; the risk that third-party market projections may not materialize or that the Company may not be able to participate in projected market opportunities; and our ability to enter into partnering or licensing arrangements on acceptable terms, or at all. 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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