June 29, 2026

Artelo Biosciences Presents Clinical and Biomarker Data Supportive of the Development of ART26.12 and Follow-On FABP5 Inhibitors at ICRS 2026

First-in-Human Results Demonstrate Favorable Safety and Pharmacokinetics Profile

AI Aided Target Engagement Research Advancing Development of Novel Biomarkers

SOLANA BEACH, Calif., June 29, 2026 (GLOBE NEWSWIRE) -- Artelo Biosciences, Inc. **(Nasdaq: ARTL),** a clinical-stage pharmaceutical company focused on modulating lipid-signalling pathways to develop treatments for people living with cancer, pain, dermatologic, or neurological conditions, today announced two presentations of clinical and translational research findings supporting the development of ART26.12, the Company's proprietary selective fatty acid binding protein 5 (FABP5) inhibitor, at the International Cannabinoid Research Society (ICRS) 2026 Annual Symposium. The presentations include results from the Phase 1 clinical study of ART26.12 as well as new biomarker analyses designed to identify indicators of target engagement and pharmacological activity in healthy volunteers.

During the first of two presentations, Professor Saoirse E. O'Sullivan, Vice President of Translational Science at Artelo Biosciences, shared results from the first-in-human study with a selective FABP5 inhibitor titled: **A Phase 1 Study to Assess the Safety and Pharmacokinetics of ART26.12.** The Phase 1 study evaluated single ascending oral doses of ART26.12 in healthy volunteers which demonstrated that ART26.12 was generally well-tolerated across all evaluated dose levels and exhibited predictable, linear pharmacokinetics.

Key findings included:

- Favorable safety and tolerability profile across all cohorts
- Linear, dose-dependent pharmacokinetics
- Dose-proportional systemic exposure
- ART26.12 plasma concentrations exceeding projected therapeutic levels based on preclinical efficacy studies
- Wide margin between anticipated therapeutic exposures and maximum tolerated doses

“Successfully advancing ART26.12 through its initial clinical testing marks a significant achievement for Artelo and validates years of foundational research focused on FABP5 biology,” said Professor Saoirse E. O'Sullivan. “The favorable safety and pharmacokinetic profiles support continued clinical development of this novel therapeutic approach.”

Also today, Myles Osborn, Lead Medicinal Chemist at Artelo Biosciences, delivered new data in a presentation titled: **Unbiased Identification of Putative Clinical Biomarkers of Target Engagement with the Selective Fatty Acid Binding Protein 5 Inhibitor ART26.12.**

Researchers interrogated proteomic and lipidomic databases from preclinical studies with ART26.12 with plasma samples collected from healthy volunteers who participated in the single ascending dose Phase 1 study of ART26.12 to identify potential biomarkers. Aided by artificial intelligence and machine learning algorithms, the analysis identified treatment-related changes across multiple biological pathways, including lipid metabolism, inflammation, extracellular matrix regulation, phospholipid signaling, and triglyceride metabolism. The findings represent an important step toward establishing pharmacodynamic biomarkers that could support future clinical development and provide insight into biological target engagement.

“Our analyses identified distinct changes in both the plasma proteome and lipidome following administration of ART26.12,” said Myles Osborn. “We are continuing to evaluate these molecular signatures and their relationship to FABP5 inhibition, with the goal of establishing definitive biomarkers that may help guide future development efforts and provide early indications of therapeutic activity.”

“The favorable clinical profile observed in our Phase 1 study, combined with emerging biomarker data that may ultimately help us evaluate biological activity and identify optimal dosing strategies as well as selecting patients, strengthens our confidence in the potential of ART26.12 as a first-in-class FABP5 inhibitor," said Andrew Yates, Vice President and Chief Scientific Officer of Artelo Biosciences. “Together, these clinical and translational findings demonstrate important progress in our effort to advance ART26.12, as well as follow-up FABP5 inhibitors we are developing for indications beyond pain.”

“We believe ART26.12 has the potential to become an important advancement as a non-opioid therapy addressing painful neuropathies where current treatment options remain inadequate,” added Dr. Yates.

About ART26.12
ART26.12, Artelo’s lead Fatty Acid Binding Protein 5 (FABP5) inhibitor, is under development as a novel, peripherally acting, non-opioid, non-steroidal analgesic, initially for the treatment of chemotherapy-induced peripheral neuropathy (CIPN). Human studies with ART26.12 have demonstrated a favorable safety profile with no serious adverse events, as well as predictable, linear pharmacokinetics and dosing flexibility in both fed and fasted states. Fatty Acid Binding Proteins (FABPs) are a family of intracellular proteins that chaperone lipids important to normal cellular function. In addition to ART26.12, Artelo’s extensive library of small molecule inhibitors of FABPs has shown therapeutic promise for the treatment of certain cancers, neuropathic and nociceptive pain, psoriasis, and anxiety disorders.

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 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, commercial, and treasury management practices, including digital assets, 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 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.

Investor Relations Contact:
Crescendo Communications, LLC
Tel: 212-671-1020
Email: ARTL@crescendo-ir.com

Source: Artelo Biosciences