**Filed Pursuant to Rule 424(b)(5)**
**Registration No. 333-295537**

**PROSPECTUS SUPPLEMENT**
(To Prospectus dated May 19, 2026)

**$6,530,000**
**Common Stock**

This prospectus supplement relates to the issuance and sale of shares of our common stock, par value $0.001 per share, having an aggregate offering price of up to $6,530,000, from time to time solely through H.C. Wainwright & Co., LLC, as exclusive sales agent (who we refer to herein as "HCW" or the "Sales Agent"). Any sales consummated under this prospectus supplement will be made under an "at-the-market" offering program under the terms of an At the Market Offering Agreement between us and HCW, dated May 26, 2026 (the "Sales Agreement"). See "*Plan of Distribution*."

Sales of our common stock, if any, under this prospectus supplement may be made in sales deemed to be "at-the-market offerings" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended (the "Securities Act"). The Sales Agent is not required to sell any specific number or dollar amount of securities and will use commercially reasonable efforts consistent with its normal trading and sales practices to sell on our behalf any shares to be offered by us under the Sales Agreement. There is no arrangement for funds to be received in any escrow, trust or similar arrangement. If we and the Sales Agent agree on any method of distribution other than sales of shares of our common stock on or through an existing trading market at market prices, we will file a further prospectus supplement providing all information about such offering as required by Rule 424(b) under the Securities Act.

The Sales Agent will be entitled to compensation under the terms of the Sales Agreement at a commission rate of 3.0% of the gross sales price per share of common stock sold. In connection with the sale of the common stock on our behalf, the Sales Agent will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of the Sales Agent will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to the Sales Agent against certain civil liabilities, including liabilities under the Securities Act.

Our common stock is listed on the Nasdaq Capital Market tier of The Nasdaq Stock Market LLC ("Nasdaq") under the symbol "ARTL." On May 22, 2026, the last reported sale price of our common stock on Nasdaq was $1.19 per share.

As of May 26, 2026, the aggregate market value of our outstanding common stock held by non-affiliates was $36,721,908.08 based upon 3,485,540 shares of common stock outstanding, of which 3,484,052 shares were held by non-affiliates, and a price per share of our common stock of $10.54 based on the closing price of our common stock on March 27, 2026. Pursuant to General Instruction I.B.6. of Form S-3, in no event will we sell securities pursuant to this prospectus having a value exceeding more than one-third of the aggregate market value of our outstanding common stock held by non-affiliates in any 12-month period so long as the aggregate market value of our outstanding common stock held by non-affiliates remains below $75 million. In the event that subsequent to the date of this prospectus the aggregate market value of our outstanding common stock held by non-affiliates equals or exceeds $75 million, such limitation on sales pursuant to General Instruction I.B.6 shall not apply to sales subsequently made pursuant to this prospectus. During the 12-calendar month period ending on, and including the date of this prospectus, we sold securities with an aggregate market value of $5,706,345.75 pursuant to General Instruction I.B.6. of Form S-3.

**Investing in our shares of Common Stock involves a high degree of risk and uncertainty. See "Risk Factors" beginning on page S-6 this prospectus supplement and the other documents that are incorporated by reference in this prospectus supplement and the accompanying base prospectus.**

**NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS SUPPLEMENT OR THE ACCOMPANYING PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.**

**H.C. Wainwright & Co.**

The date of this prospectus supplement is May 26, 2026.

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**PROSPECTUS SUPPLEMENT**



**BASE PROSPECTUS**

## ABOUT THIS PROSPECTUS SUPPLEMENT

As used in this prospectus, unless the context otherwise requires or indicates, references to "the Company," "our company," "we," "our," "ourselves," "us" and "Artelo" refer to Artelo Biosciences, Inc., a Nevada corporation, and its consolidated subsidiaries.

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission (the "SEC"), using a "shelf" registration process.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of common stock and also adds to and updates information contained in the accompanying base prospectus and the documents incorporated by reference in this prospectus supplement and the base prospectus. The second part, the base prospectus, dated May 19, 2026, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus supplement, we are referring to both parts of this document combined and when we refer to the accompanying prospectus, we are referring to the base prospectus.

To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus supplement, the accompanying base prospectus and the documents incorporated into each by reference include important information about us, the securities being offered and other information you should know before investing. You should read this prospectus supplement and the accompanying base prospectus together with the additional information described under the heading "*Where You Can Find Additional Information*" before investing in our securities.

You should not assume that the information in this prospectus supplement, the accompanying prospectus or any other offering materials is accurate as of any date other than the date on the front of each document, regardless of the time of delivery of this prospectus supplement, the accompanying prospectus or such other offering materials or the time of any sale of securities. Our business, financial condition, results of operations and prospects may have changed since then.

## FORWARD-LOOKING STATEMENTS

The information in this prospectus supplement and the accompanying prospectus and the information incorporated herein and therein by reference includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements are based on current expectations and beliefs and involve numerous risks and uncertainties that could cause actual results to differ materially from expectations. These forward-looking statements should not be relied upon as predictions of future events as we cannot assure you that the events or circumstances reflected in these statements will be achieved or will occur. When used in this report, the words "believe," "may," "could," "will," "estimate," "continue," "anticipate," "intend," "expect," "indicate," "seek," "should," "would" and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements contain these identifying words. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements.

You should not rely upon forward-looking statements as guarantees of future performance or as predictions of future events. We have based these forward-looking statements largely on our current estimates of our financial results and our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions that may cause our actual results to differ materially from those contained in any forward-looking statements, including those described in "*Risk Factors*" in this prospectus supplement, the accompanying prospectus and in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q and in our other filings with the SEC that are incorporated by reference in this prospectus supplement or the accompanying prospectus. Moreover, we operate in a very competitive and rapidly changing environment and new risks emerge from time to time. In light of these risks, uncertainties and assumptions, the forward-looking statements discussed in this prospectus supplement, the accompanying prospectus and in our most recent Annual Report on Form 10-K, subsequent Quarterly Reports on Form 10-Q and any other filings with the SEC that are incorporated by reference in this prospectus supplement or the accompanying prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

These forward-looking statements include, among other things, statements about:

- our financial condition and our ability to continue as a going concern;
- our plans to obtain funding for our operations, including funding necessary to complete our clinical trials, develop, manufacture and commercialize our product candidates;
- our ability to raise any current or future funding to meet our capital requirements;
- the expected timing of the initiation and completion of our clinical studies for our product candidates;
- the size and growth of the markets for our product candidates;
- our commercialization, marketing, and manufacturing capabilities and strategies;
- geopolitical tensions, including tariffs and any war, regional conflict, or acts of terror, that can disrupt investment, supply chains and the economy generally;
- ability to compete with companies currently producing alternative treatment methods;
- the cost, timing and outcomes of any potential litigation involving our product candidates;
- regulatory developments in the U.S. and internationally;
- the development, regulatory approval, efficacy and commercialization of competing product candidates;
- our ability to attract and retain key scientific or management personnel;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our products and technology;
- the terms and conditions of licenses granted to us and our ability to license additional intellectual property related to our product candidates, as appropriate;
- potential claims related to our intellectual property;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to maintain compliance with Nasdaq listing requirements;
- our cash investment strategy;
- our ability to develop innovative new product candidates; and
- our financial performance.

If any of these risks or uncertainties materialize or any of these assumptions prove incorrect, our results could differ materially from the forward-looking statements in this prospectus supplement. All forward-looking statements in this prospectus supplement are current only as of the date of this prospectus supplement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any statement is made or to reflect the occurrence of unanticipated events except as required by law.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus supplement, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information.

## PROSPECTUS SUMMARY

*This summary highlights selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our securities. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the risks associated with an investment in our company discussed in the "Risk Factors" section of this prospectus supplement, the accompanying prospectus and in the documents we incorporate by reference, before making an investment decision. Some of the statements in this prospectus supplement, the accompanying prospectus and the other documents incorporated by reference are forward-looking statements. See the section titled "Forward-Looking Statements."*

**Company Overview**

We incorporated in the State of Nevada on May 2, 2011, and are presently based in the County of San Diego, California. We are a clinical stage biopharmaceutical company focused on the development and commercialization of therapeutics that target lipid-signaling modulation pathways, including the endocannabinoid system (the "ECS"), a network of receptors and neurotransmitters that form a biochemical communication system throughout the body.

Our product candidate pipeline broadly leverages leading scientific methodologies and balances risk across mechanisms of action and stages of development. Our programs represent a comprehensive approach in utilizing the power and promise of lipid signaling to develop pharmaceuticals for patients with unmet healthcare needs.

We are currently developing a novel, benzimidazole dual cannabinoid (CB) agonist that targets both the CB1 and CB2 peripheral receptors. This synthetic small molecule program is a G protein-coupled receptor ("GPCR") designated ART27.13 and was initially developed by AstraZeneca plc. We are developing ART27.13 as a potential treatment for cancer-related anorexia and it is currently in a Phase 1b/2a trial, titled the Cancer Appetite Recovery Study ("CAReS"). In an interim analysis of the on-going Phase 2a CAReS trial, patients with cancer anorexia receiving ART27.13 demonstrated a mean weight gain of over 6% compared to a 5% loss in the placebo group, while maintaining a safety profile similar to the Phase 1b despite doses up to twice the previous maximum. Currently there is no FDA approved treatment for cancer anorexia cachexia syndrome.

Our second program, ART26.12 is a small molecule and the lead product candidate from our chemical library of inhibitors of fatty acid binding proteins, notably Fatty Acid Binding Protein 5 ("FABP5"). We received U.S. Food & Drug Administration (the "FDA") clearance for our Investigational New Drug ("IND") application for ART26.12 in July 2024 and have completed enrolment to a Phase 1 clinical trial in healthy subjects to support the development towards an agent intended to treat chemotherapy-induced peripheral neuropathy ("CIPN"). In addition, ART26.12 may have broad applications as a cancer therapeutic, as a treatment for dermatologic conditions, such as psoriasis, as a treatment for pain and inflammation, and potential use in anxiety-related disorders, including post-traumatic stress disorder. In June 2025, we announced favorable results from our first-in-human study evaluating ART26.12. The Phase 1 Single Ascending Dose (SAD) study was designed to assess the safety, tolerability, and pharmacokinetics of ART26.12 in healthy volunteers and enrolled 49 subjects. All adverse events (AEs) were mild, transient, and self-resolving. No drug-related AEs were observed in the blinded dataset, and no tolerability issues or safety signals were detected across multiple assessments (vital signs, ECGs, clinical laboratory tests, physical examinations, and visual analogue mood scales). In addition, full dose-exposure profiles were successfully explored. Plasma analysis confirmed dose-dependent, linear absorption across the evaluated range. A wide safety margin was observed between estimated therapeutic plasma concentrations and the highest exposure levels achieved, supporting potential titration for maximum efficacy in future studies. In addition to ART26.12 in CIPN, our extensive library of small molecule inhibitors of Fatty Acid Binding Proteins ("FABPs") has shown therapeutic potential for the treatment of certain cancers, neuropathic and nociceptive pain, psoriasis, and anxiety disorders.

ART12.11 is our wholly owned, proprietary cocrystal composition of cannabidiol (CBD) and tetramethylpyrazine (TMP). Isolated as a single crystalline form, ART12.11 has exhibited better pharmacokinetics and improved efficacy compared to other forms of CBD in nonclinical studies. Greatly enhanced pharmaceutical properties, including physicochemical, pharmacokinetic, and pharmacodynamic advantages have been observed with ART12.11. We believe a more consistent and improved bioavailability profile may ultimately lead to increased safety and efficacy in humans, thus making ART12.11 a preferred CBD pharmaceutical composition. The U.S. issued composition of matter patent for ART12.11 is enforceable until December 10, 2038 and has now been granted or validated in 21 additional countries.

We obtained two of our patent protected product candidates through our in-licensing activities. Our first in-licensed program, ART27.13, is being developed for cancer-related anorexia. ART27.13 is a peripherally-selective high-potency dual CB1 and CB2 full-receptor agonist, which was originally invented at AstraZeneca plc. We exercised our option to exclusively license this product candidate through the NEOMED Institute ("NEOMED"), a Canadian not-for-profit corporation, renamed adMare Bioinnovations ("adMare") in June 2019, which had obtained rights to ART27.13 from AstraZeneca plc. In Phase 1, single dose studies in healthy volunteers and a multiple ascending dose study in individuals with chronic low back pain conducted by AstraZeneca plc, ART27.13 exhibited an attractive pharmacokinetic and absorption, distribution, metabolism, and excretion profile and was well tolerated within the target exposure range. It also exhibited dose-dependent and potentially clinically meaningful increases in body weight. Importantly, the changes in body weight were not associated with fluid retention or other adverse effects and occurred at exposures without central nervous system ("CNS") side effects. Discussions with United Kingdom ("UK"), U.S. and Canadian regulators indicated there is a potential pathway for development of ART27.13 for the treatment of cancer-related anorexia, which affects approximately 60% of advanced stage cancer patients.

We commenced enrollment and dosed the first patient in CAReS, our Phase 1b/2a clinical study of cancer-related anorexia with ART27.13 in April 2021 and completed enrolling patients in the Phase 1b during the first quarter of 2023. Data from the Phase 1b stage was used to determine the most effective and safe dose selected as the starting dose for the Phase 2a portion of CAReS. We received approval from the regulatory authorities in the UK, Ireland and Norway to increase the daily dose from the starting dose of 650 micrograms to 1,000 micrograms after 4 weeks and up to 1,300 micrograms initiated at 8 weeks in patients for whom intra-patient dose escalation is expected to be well tolerated. We also received approval from the regulatory authorities to enroll 40 evaluable patients into the Phase 2a stage with a 3:1 randomization of ART27.13 to placebo. We initiated the Phase 2a portion of CAReS during April 2023 with 18 clinical sites across five countries.

As of December 31, 2025, 32 participants have been enrolled. On September 3, 2025, we announced interim results from the Phase 2a CAReS trial. In the interim analysis, 18 evaluable patients-primarily with lung and gastrointestinal cancers not receiving cyclic chemotherapy-were included. After 12 weeks of treatment in patients who were titrated to the top dose evaluated of 1300 micrograms (n=5), ART27.13 demonstrated compelling increases in mean body weight of 6.38% (Standard Deviation or SD 9.50) compared to patients on placebo (n=6) who lost -5.42% (SD 8.17). The maximum weight gain in the ART27.13 group reached 18.5%, versus only 0.4% in placebo. The maximum weight loss in the placebo arm was -17.4%, compared to just -3.0% in the ART27.13 group. Additional benefits were seen in lean body mass, with a +4.23% increase (SD 5.37) in the treatment group versus a -3.15% loss (SD 4.89) in placebo at one month, as well as qualitative improvements in total and weekly activity scores.

Safety results were consistent with prior findings. Among the 32 participants enrolled in the CAReS Phase 2 trial to date, 7 patients (22%) experienced adverse events that may be related to ART27.13. All were mild or moderate, with the exception of a single case of severe malaise, and no drug-related serious adverse events were reported. These data are aligned with safety outcomes observed in Phase 1 of CAReS, supporting ART27.13's overall favorable tolerability and acceptable safety profile.

On August 11, 2025, we announced that the European Patent Office (EPO) issued a Notice of Allowance for Artelo's European patent application No. 21827629.3. The application covers the intended commercial formulation of ART27.13. The allowed claims protect compositions of ART27.13 dispersed in polyethylene glycol, including the Company's intended commercial formulation. This development marks a major milestone in Artelo's global intellectual property strategy, and we believe it positions the Company for long-term value creation with ART27.13.

Our second in-licensed patented program is being advanced from our platform of small-molecule inhibitors of FABPs, notably FABP5. FABPs are attractive therapeutic targets, however, the high degree of sequence and structural similarities among family members made the creation of drugs targeting specific FABPs challenging. FABP5 is believed to specifically target and regulate one of the body's endogenous cannabinoids, anandamide ("AEA"). While searching for a FABP5 inhibitor to regulate AEA, researchers at Stony Brook University ("SBU") discovered the chemistry for creating a large library of compounds which we believe to be highly specific and potent small molecule inhibitors of FABP5 and other isoforms. We licensed the rights to world-wide intellectual property in all fields and certain know-how to these inhibitors from SBU.

Our lead FABP5 inhibitor program is designated ART26.12. Preclinical research with ART26.12 showed evidence of activity in multiple pain models including osteoarthritis, cancer bone pain, and neuropathic pain. Based upon positive preclinical evidence from five separate studies showing promising activity and a differentiated mechanism-of-action for the prevention and treatment of painful neuropathies, including diabetic neuropathy and CIPN, we prioritized CIPN as the initial indication for development of ART26.12. Treatment and/or prevention of CIPN is a significant unmet need, often resulting in anti-cancer treatment delays or discontinuations, and there are currently no approved treatments for CIPN by the regulatory authorities in the U.S., UK or EU. We submitted an IND application for ART26.12 to the FDA on June 10, 2024 and received a study may proceed notice from the FDA on July 8, 2024. First-in-human studies for ART26.12 began in Q4 of 2024 and we successfully completed dosing all 48 healthy volunteers planned for the Phase 1 Single Ascending Dose study at the end of April 2025. In addition to its potential as a synthetic endocannabinoid modulator with development targeting pain, inflammation, dermatologic conditions such as psoriasis, FABP5 is understood to play an important role in lipid signaling and is believed to be an attractive strategy for drug development in oncology. Large amounts of human biomarker and animal model data support FABP5 as an oncology target, including triple negative breast cancer, ovarian cancer, cervical cancer, and castration-resistant prostate cancer. Through our sponsored research we have also subsequently identified a potential role for FABP5 inhibition to treat anxiety disorders, such as Post Traumatic Stress Disorder ("PTSD"). We have been awarded a research grant in Canada to expand on our earlier research at the University of Western Ontario in this new development area.

In addition to our in-licensed programs, we have internal discovery research initiatives which resulted in ART12.11, a proprietary cocrystal composition of CBD and TMP. The crystal structure of CBD is known to exhibit solid polymorphism, or the ability to manifest in different forms. Polymorphism can adversely affect stability, dissolution, and bioavailability of a drug product and thus may affect its quality, safety, and efficacy. Based upon our research, we believe our CBD cocrystal exists as a single crystal form and as such is anticipated to have advantages over other solid forms of CBD that exhibit polymorphism. Emerging data demonstrates potential advantages of this single crystal structure, including improved stability, solubility, and a more consistent absorption profile. We believe these features have contributed to a more consistent and improved bioavailability and pharmacokinetic profile which may ultimately lead to improved safety and efficacy in human therapeutics, as already demonstrated in animal studies.

Presently, we have two U.S. patents, one pending U.S. patent application, six foreign patents (Australia, China, Mexico, Japan, Taiwan, and Europe, including validation in 15 countries) and three pending foreign patent applications (Brazil, Canada and South Korea) directed to our cocrystal composition of CBD. Composition claims are generally known in the pharmaceutical industry as the most desired type of intellectual property and should provide for long lasting market exclusivity for our synthetic CBD cocrystal drug product candidate. In addition, due to the reasons outlined above, we believe that our synthetic CBD cocrystal will continue to demonstrate a superior set of pharmaceutical properties compared to non-cocrystal CBD compositions. We plan to develop ART12.11 for multiple potential indications where CBD has shown activity of such anxiety disorders, including PTSD, depression, and other possible uses such as epilepsy and insomnia.

| Product Candidate | Patent Status | License |
|---|---|---|
| ART27.13 – Synthetic GPCR $CB_1$ and $CB_2$ Receptor Agonist | One licensed (1) issued patent (U.S.) including composition of matter, term 5/31/28, and one (1) Artelo-owned composition application with fourteen (14) pending National Phase filings, and a second composition of matter application pending in the US, EPO, JP, Taiwan, and US. Additionally, one (1) pending PCT Application related to the treatment of eye-disorders, including glaucoma. | Worldwide exclusive license |
| ART26.12 – FABP5 inhibitor and FABP5 inhibitors platform | Six (6) patents issued (U.S.) and ten (10) issued foreign patents. Covers the target, composition of matter, and utility claims. In addition, there are twenty-five (25) pending applications related to the ART26.12 program and related chemistries. | Worldwide exclusive license |
| ART12.11 – Synthetic CBD Cocrystal | Issued two (2) composition of matter patents (U.S.) and one (1) method of use patent (U.S.). Both with a term through 12/10/38. Six (6) issued foreign patents (with a term through 12/10/38) and four (4) pending applications (U.S. & Intl). | N/A (wholly owned by Artelo) |

We are developing our product candidates in accordance with traditional regulated drug development standards and expect to make them available to patients via prescription or physician orders only after obtaining marketing authorization from a country's regulatory authority, such as the FDA. Our management team has experience developing, commercializing, and partnering ethical pharmaceutical products, including several first-in-class therapeutics. Based upon our current management's capabilities and the future talent we may attract, we plan to retain the option to internally develop and commercialize our programs; however, we may explore collaborations with partners in the biopharmaceutical industry when a partnering strategy serves to maximize value for our stockholders.

**Corporate Information**

We were incorporated in the State of Nevada on May 2, 2011, as Knight Knox Development Corp. On January 19, 2017, we changed our name to Reactive Medical, Inc. and on April 14, 2017, we changed our name to Artelo Biosciences, Inc. Our principal executive office is located at 505 Loma Santa Fe, Suite 160, Solana Beach, California 92075 and our telephone number is (858) 925-7049. Our corporate website address is www.artelobio.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus.

**Recent Developments**

Subsequent to March 31, 2026, the Company repaid $405,130 of the outstanding principal and $24,712 of accrued interest related to the convertible notes issued in May 2025, representing 82% of outstanding convertible notes. The Company expects the remaining outstanding principal and accrued interest to be repaid by June 30, 2026.

Subsequent to March 31, 2026, 2,547,407 shares were issued to certain accredited investors in connection with the exercise of pre-funded warrants issued to such accredited investors pursuant to a securities purchase agreement, dated as of March 27, 2026, between the Company and such accredited investors, and 62,101 shares were issued to Square Gate Capital Master Fund, LLC – Series 5 (“Square Gate”) in connection with the exercise of pre-funded warrants issued to Square Gate pursuant to an equity purchase agreement, dated as of January 30, 2026, between the Company and Square Gate.

On April 2, 2026 and April 3, 2026, the March 2026 notes, comprised of (i) a 12% bridge note that matured on January 15, 2027, in the aggregate principal amount of $237,300, which was issued on March 12, 2026, (ii) a 12% bridge note that matured on January 15, 2027, in the aggregate principal amount of $113,000, which was issued on March 12, 2026, and (iii) a 10% promissory note that matured 12 months from the date of issuance, in the aggregate principal amount of $315,000, which was issued on March 20, 2026, were paid in full for consideration of $719,969.

On May 11, 2026, we provided notice to R.F. Lafferty & Co., Inc. (“Lafferty”) of our election to terminate that certain At-The-Market Offering Agreement, dated July 18, 2025, by and between the Company and Lafferty (the “Lafferty Agreement”), which termination will be effective on May 18, 2026, in accordance with the terms of the Lafferty Agreement. Pursuant to the Lafferty Agreement, we were entitled to offer and sell, from time to time through Lafferty, shares of common stock having an aggregate offering price of up to $6,500,000 in an at-the-market equity offering program. Through May 11, 2026, we had sold an aggregate of 50,858 shares of common stock pursuant to the Lafferty Agreement, resulting in gross proceeds of $451,526.95.

**THE OFFERING**

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|---|---|
| Common stock offered by us | Shares of our common stock with an aggregate offering price of up to $6,530,000. |
| Plan of distribution | "At-the-market" offering that may be made from time to time through the Sales Agent, H.C. Wainwright & Co., LLC. See "*Plan of Distribution*." |
| Use of proceeds | We intend to use the net proceeds from this offering, if any, to advance our product candidates, as well as for working capital and general corporate purposes. See "*Use of Proceeds*." |
| Common stock to be outstanding immediately after this offering | Up to 8,972,935 shares of common stock, assuming sales of 5,487,395 shares of common stock in this offering at an assumed offering price of $1.19 per share (the closing price on May 22, 2026). The actual number of shares sold will vary depending on the price at which the shares may be sold from time to time during this offering. |
| Risk factors | See "*Risk Factors*" in this prospectus supplement, the accompanying prospectus and otherwise incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider carefully before deciding to invest in shares of our common stock. |
| Trading market and symbol | Our shares of common stock are traded on Nasdaq under the symbol "ARTL." |

The number of shares of our common stock to be outstanding immediately after this offering is based on 3,485,540 shares of our common stock outstanding as of May 26, 2026, and excludes as of that date:

- 205,518 shares of common stock issuable upon the exercise of options granted under our 2018 Equity Incentive Plan (the "2018 Plan");
- 7,275 shares of common stock reserved for future issuance under the 2018 Plan;
- 7,557,519 shares of common stock issuable upon the exercise of warrants; and
- 9,216 shares of common stock issuable upon the conversion of convertible notes.

## RISK FACTORS

*An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks described below and discussed under the sections captioned "Risk Factors" contained in our most recent Annual Report on Form 10-K or Quarterly Report on Form 10-Q, as filed with the SEC, as well as any amendment or updates to our risk factors reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus supplement and the accompanying prospectus in their entirety, together with other information in this prospectus supplement, the accompanying prospectus, and the information and documents incorporated by reference herein and therein, and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.*

### Risks Related to Our Securities and this Offering

***Our financial condition raises substantial doubt as to our ability to continue as a going concern.***

As of March 31, 2026, we had approximately $10.3 million in cash, cash equivalents and investments, and working capital of $4.6 million, and we have incurred and expect to continue to incur significant costs in the continued development of our drug candidates. For the three months ended March 31, 2026, we recorded a net loss of approximately $3.0 million and used cash in operations of approximately $1.2 million. Our financial statements for the three months ended March 31, 2026 have been prepared assuming that we will continue to operate as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. To date, we have not generated substantial product revenues from our activities and have incurred substantial operating losses. We expect that we will continue to generate substantial operating losses for the foreseeable future until we complete development and receive approval of one of our product candidates. We expect to continue to fund our operations primarily through additional raises of capital.

These conditions raise substantial doubt about our ability to continue as a going concern. The Company has evaluated the significance of the uncertainty regarding the Company's financial condition in relation to its ability to meet its obligations, which has raised substantial doubt about the Company's ability to continue as a going concern. The Company believes if it is unable to obtain additional financing, existing cash resources will not be sufficient to enable it to fund the anticipated level of operations through one year from the date the accompanying financial statements are issued. There can be no assurances that the Company will be able to secure additional financing on acceptable terms. In the event the Company does not secure additional financing, the Company will be forced to delay, reduce, or eliminate some or all of its discretionary spending, which could adversely affect the Company's business prospects, ability to meet long-term liquidity needs and the ability to continue operations.

***Our common stock may be delisted from Nasdaq if the Company cannot maintain compliance with Nasdaq's continued listing requirements.***

In the past, we have received written notifications from Nasdaq informing us that we no longer meet certain continued listing requirements including maintaining minimum stockholders' equity pursuant to Nasdaq Listing Rule 5550(b)(1) (the "Equity Rule") and holding annual meetings pursuant to Nasdaq Listing Rule 5620(a) (the "Annual Meeting Rule"). In order to maintain our listing on Nasdaq, the Company is required to comply with these and all other Nasdaq listing standards.

On April 6, 2026, we received a letter from Nasdaq confirming that the Company has regained compliance with the Equity Rule and the Annual Meeting Rule, further to a letter from the Nasdaq Hearings Panel (the "Panel") dated February 2, 2026, which granted the Company an exception to cure both listing deficiencies, and informing us that the Company will be subject to a Mandatory Panel Monitor through April 6, 2027, pursuant to Nasdaq Listing Rule 5815(d)(4)(B). If, within that one-year monitoring period, the Listing Qualifications Department staff (the "Staff") finds the Company again out of compliance with the Equity Rule, notwithstanding Nasdaq Listing Rule 5810(c)(2), the Company will not be permitted to provide the Staff with a plan of compliance with respect to that deficiency and the Staff will not be permitted to grant additional time for the Company to regain compliance with respect to that deficiency, nor will the Company be afforded an applicable cure or compliance period pursuant to Nasdaq Listing Rule 5810(c)(3). Instead, the Staff will issue a Delist Determination Letter, and the Company will have an opportunity to request a new hearing with the initial Panel or a newly convened Hearings Panel if the initial Panel is unavailable. The Company will have the opportunity to respond/present to the Hearings Panel as provided by Nasdaq Listing Rule 5815(d)(4)(C), and the Company's securities may be at that time delisted from Nasdaq.

Although we intend to use all reasonable efforts to maintain compliance with all Nasdaq listing standards, there can be no assurance that we will be able to maintain compliance with the listing standards or that we will otherwise be in compliance with other applicable Nasdaq listing criteria. Furthermore, Nasdaq may delist our common stock for public interest concerns, even if we maintain compliance for continued listing on Nasdaq under the listing requirements.

If the Company is unable to maintain compliance with Nasdaq's continued listing requirements, delisting from The Nasdaq Capital Market or any Nasdaq market could make trading our common stock more difficult for investors, potentially leading to declines in our share price and liquidity. In addition, without a Nasdaq market listing, stockholders may have a difficult time getting a quote for the sale or purchase of our stock, the sale or purchase of our stock would likely be made more difficult and the trading volume and liquidity of our stock could decline. Delisting from Nasdaq could also result in negative publicity and could also make it more difficult for us to raise additional capital. The absence of such a listing may adversely affect the acceptance of our common stock as currency or the value accorded by other parties. Further, if the Company is delisted, the Company would also incur additional costs under state blue sky laws in connection with any sales of our securities. These requirements could severely limit the market liquidity of our common stock and the ability of our stockholders to sell our common stock in the secondary market. If our common stock is delisted by Nasdaq, our common stock may be eligible to trade on an over-the-counter quotation system, such as the OTCQB market, where an investor may find it more difficult to sell our stock or obtain accurate quotations as to the market value of our common stock. The Company cannot assure you that our common stock, if delisted from Nasdaq, will be listed on another national securities exchange or quoted on an over-the counter quotation system. If our common stock is delisted, it may come within the definition of "penny stock" as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act") and would be covered by Rule 15g-9 of the Exchange Act. Rule 15g-9 imposes additional sales practice requirements on broker-dealers who sell securities to persons other than established customers and accredited investors. For transactions covered by Rule 15g-9, the broker-dealer must make a special suitability determination for the purchaser and receive the purchaser's written agreement to the transaction prior to the sale. Consequently, Rule 15g-9, if it were to become applicable, would affect the ability or willingness of broker-dealers to sell our securities, and accordingly would affect the ability of stockholders to sell their securities in the public market. These additional procedures could also limit our ability to raise additional capital in the future.

***We have broad discretion in the use of our available cash and other sources of funding, including the net proceeds we receive from this offering, and may not use them effectively.***

Our management has broad discretion in the use of our available cash and other sources of funding, including the net proceeds we receive in this offering, and could spend those resources for purposes other than those described in the "*Use of Proceeds*" portion of this prospectus supplement, and in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest our available cash, including the net proceeds we receive in this offering, in a manner that does not produce income or that loses value.

***If you purchase shares of our common stock sold in this offering, you may experience immediate and substantial dilution in the net tangible book value of your shares. In addition, we may issue additional equity or convertible debt securities in the future, which may result in additional dilution to investors.***

The price per share of our common stock being offered may be higher than the net tangible book value per share of our outstanding common stock prior to this offering. Assuming that an aggregate of 5,487,395 shares of our common stock are sold at a price of $1.19 per share, the last reported sale price of our common stock on Nasdaq on May 22, 2026, for aggregate gross proceeds of approximately $6,530,000 and after deducting commissions and estimated offering expenses payable by us, new investors in this offering will incur accretion of $0.12 per share. For a more detailed discussion of the foregoing, see the section entitled "*Dilution*" in this prospectus supplement. To the extent outstanding stock options or warrants are exercised, there will be further dilution to new investors.

***Resales of our common stock in the public market during this offering by our stockholders may cause the market price of our common stock to fall.***

We may issue common stock from time to time in connection with this offering. This issuance from time to time of these new shares of our common stock, or our ability to issue these shares of common stock in this offering, could result in resales of our common stock by our current stockholders concerned about the potential dilution of their holdings. In turn, these resales could have the effect of depressing the market price for our common stock.

***The actual number of shares we will issue under the Sales Agreement, at any one time or in total, is uncertain.***

Subject to certain limitations in the Sales Agreement with HCW and compliance with applicable law, we have the discretion to deliver sales notices to HCW at any time throughout the term of the Sales Agreement. The number of shares that are sold by HCW after our delivering a sales notice will fluctuate based on the market price of the common stock during the sales period and limits we set with HCW.

***The shares of common stock offered under this prospectus supplement and the accompanying prospectus may be sold in "at the market" offerings, and investors who buy shares at different times will likely pay different prices.***

Investors who purchase shares under this prospectus supplement and the accompanying prospectus at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience declines in the value of their shares as a result of share sales made at prices lower than the prices they paid.

***We may be required to raise additional financing by issuing new securities with terms or rights superior to those of our existing securityholders, which could adversely affect the market price of shares of common stock and our business.***

We will require additional financing to fund future operations, including for research and development, clinical trials, expansion in current and new markets, development and acquisition, capital costs and the costs of any necessary implementation of technological innovations or alternative technologies. We may not be able to obtain financing on favorable terms, if at all. If we raise additional funds by issuing equity securities, the percentage ownership of our current stockholders will be reduced, and the holders of the new equity securities may have rights superior to those of our existing securityholders, which could adversely affect the market price of our common stock and the voting power of shares of our common stock.

***We have never paid dividends on our capital stock, and we do not anticipate paying dividends in the foreseeable future.***

We have never paid dividends on any of our capital stock and currently intend to retain any future earnings to fund the growth of our business. We may also enter into credit agreements or other borrowing arrangements in the future that will restrict our ability to declare or pay cash dividends on our common stock. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant. As a result, capital appreciation, if any, of the securities will be the sole source of gain, if any, for the foreseeable future.

***Any market activity involving short selling or other market making activities could result in negative impact to the market price for our common stock.***

Short selling is a method used to capitalize on an expected decline in the market price of a security and could depress the price of our common stock, which could further increase the potential for future short sales. Sales of our common stock could encourage short sales by market participants, which could create negative market momentum. Continued short selling may bring about a temporary, or possibly long term, decline in the market price of our common stock. We cannot predict the size of future issuances or sales of common stock or the effect, if any, that future issuances and sales of common stock will have on its market price or the activities of short sellers. Sales involving significant amounts of common stock, including issuances made in the ordinary course of our business, or the perception that such sales could occur, may materially and adversely affect prevailing market prices of the common stock.

***The market price of our shares may be subject to fluctuation and volatility. You could lose all or part of your investment.***

The market price of our common stock is subject to wide fluctuations in response to various factors, some of which are beyond our control. The market price of our shares on the Nasdaq Capital Market may fluctuate as a result of a number of factors, some of which are beyond our control, including, but not limited to:

- actual or anticipated variations in our and our competitors' results of operations and financial condition;
- changes in earnings estimates or recommendations by securities analysts, if our shares are covered by analysts;
- market acceptance of our product candidates;
- development of technological innovations or new competitive products by others;
- announcements of technological innovations or new products by us;
- publication of the results of preclinical or clinical trials for our product candidates;
- failure by us to achieve a publicly announced milestone;
- delays between our expenditures to develop and market new or enhanced products and the generation of sales from those products;
- developments concerning intellectual property rights, including our involvement in litigation brought by or against us;
- regulatory developments and the decisions of regulatory authorities as to the approval or rejection of new or modified products;
- changes in the amounts that we spend to develop, acquire or license new products, technologies or businesses;
- changes in our expenditures to promote our product candidates;
- our sale or proposed sale, or the sale by our significant stockholders, of our shares or other securities in the future;
- changes in key personnel;
- success or failure of our research and development projects or those of our competitors;
- the trading volume of our shares; and
- general economic and market conditions and other factors, including factors unrelated to our operating performance.

These factors and any corresponding price fluctuations may materially and adversely affect the market price of our shares and result in substantial losses being incurred by our investors. In the past, following periods of market volatility, public company stockholders have often instituted securities class action litigation. If we were involved in securities litigation, it could impose a substantial cost upon us and divert the resources and attention of our management from our business.

## USE OF PROCEEDS

The net proceeds of this offering, if any, after deducting HCW's commissions, and our estimated offering expenses, will be used to advance our product candidates through preclinical and clinical development, including manufacturing, research and technical development, clinical studies, and for working capital and general corporate purposes. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. The amount of proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the Sales Agreement.

In addition, we may use the net proceeds from this offering for investments in products or technologies that are complementary to our business, although we have no present commitments or agreements to make any such investments as of the date of this prospectus supplement.

This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. As a result, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending use of the proceeds as described above or otherwise, we intend to invest the net proceeds of this offering in government securities, high quality short-term corporate debt obligations and SEC-registered money market accounts.

## DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock and do not anticipate paying any cash dividends on our common stock at any time in the foreseeable future. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on, among other factors, our financial condition, operating results, capital requirements, general business conditions, the terms of any future credit agreements and other factors that our board of directors may deem relevant.

## DILUTION

If you invest in our common stock in this offering, your ownership interest may be diluted to the extent of the difference between the price per share of our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering.

As of March 31, 2026, our net tangible book value was $4,633,000, or $5.29 per share of our common stock, based upon 876,032 shares of common stock outstanding as of that date. Historical net tangible book value per share is equal to our total tangible assets, less total liabilities, divided by the number of outstanding shares of our common stock. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of common stock immediately after this offering.

On a pro forma basis, after giving effect to our receipt of $6,234,100 of estimated net proceeds (after deducting commissions and estimated offering expenses payable by us) from our sale of $6,530,000 of common stock in this offering at an assumed offering price of $1.19 per share (the last reported sale price of our common stock on Nasdaq on May 22, 2026), and adjusting for the change in our pro forma net tangible book value subsequent to March 31, 2026 due to the exercise of 2,609,508 pre-funded warrants at an exercise price of $0.001 per warrant, our as adjusted net tangible book value as of March 31, 2026 would have been $10,869,641, or $1.33 per share. This amount would represent an immediate decrease in net tangible book value of $3.66 per share of our common stock to existing stockholders and an accretion in net tangible book value of $0.12 per share of our common stock to new investors purchasing shares of common stock in this offering at the assumed public offering price.

The following table illustrates this hypothetical dilution on a per share basis:

| | | |
|---|---|---|
| Assumed public offering price per share | $ | 1.19 |
| Historical net tangible book value per share as of March 31, 2026 | $ | 5.29 |
| Pro forma as adjusted net tangible book value per share as of March 31, 2026 | $ | 1.33 |
| Decrease in net tangible book value per share attributable to new investors | $ | 3.96 |
| Accretion per share to new investors participating in this offering | $ | 0.12 |

The information discussed above is illustrative only and will adjust based on the actual public offering price and other terms of this offering determined at pricing and will also be affected by any securities sold by us, if any, pursuant the accompanying base prospectus. An increase of $1.00 per share in the price at which the shares are sold from the assumed offering price of $1.19 per share shown in the table above, assuming all of our common stock in the aggregate amount of $6,530,000 is sold at that price, would increase our as adjusted net tangible book value per share after the offering to $1.68 per share and would decrease the accretion in net tangible book value per share to new investors to $0.35 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of $1.00 per share in the price at which the shares are sold from the assumed offering price of $1.19 per share shown in the table above, assuming all of our common stock in the aggregate amount of $6,530,000 is sold at that price, would decrease our as adjusted net tangible book value per share after the offering to $0.29 per share and would increase the dilution in net tangible book value per share to new investors to $1.04 per share, after deducting commissions and estimated aggregate offering expenses payable by us.

The foregoing table assumes for illustrative purposes that an aggregate of 5,487,395 shares of our common stock are sold at a price of $1.19 per share, the last reported sale price of our common stock on Nasdaq on May 22, 2026, for aggregate gross proceeds of $6,530,000. The shares sold in this offering, if any, will be sold from time to time at various prices. The foregoing table also excludes:

- 205,518 shares of common stock issuable upon the exercise of options granted under the 2018 Incentive Plan;
- 7,275 shares of common stock reserved for future issuance under the 2018 Plan;
- 7,557,519 shares of common stock issuable upon the exercise of warrants; and
- 9,216 shares of common stock issuable upon the conversion of convertible notes.

To the extent that any outstanding stock options or warrants are exercised or convertible notes converted, new stock options or warrants are issued, or we otherwise issue additional shares of common stock in the future at a price less than the offering price, there will be further dilution to new investors.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

## DESCRIPTION OF CAPITAL STOCK

The description of our capital stock is incorporated by reference to Exhibit 4.1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2025 filed with the SEC on February 24, 2026, and is supplemented or updated as follows:

**General**

Our authorized capital stock consists of 166,689,815 shares of capital stock, of which 166,666,667 shares are common stock, par value $0.001 per share and 23,148 shares are preferred stock, par value $0.001 per share.

As of May 26, 2026, there were 3,485,540 shares of common stock outstanding and no shares of preferred stock outstanding.

## PLAN OF DISTRIBUTION

We have entered into the Sales Agreement with HCW, under which we may offer and sell shares of common stock from time to time through or to HCW acting as agent and/or principal. Sales of our shares of common stock, if any, under this prospectus supplement and the accompanying prospectus will be made by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act, including sales made directly on or through Nasdaq or any other existing trading market in the United States for our common stock. If we and HCW agree on any method of distribution other than sales of shares of our common stock on or through Nasdaq or another existing trading market in the United States at market prices, we will file a further prospectus supplement providing all information about such offering as required by Rule 424(b) under the Securities Act.

The Sales Agreement allows for the Company to issue or sell to or through HCW such number of shares of our common stock that does not exceed (a) the number or dollar amount of shares of common stock registered on the registration statement of which this prospectus forms a part and as reflected on this prospectus supplement, pursuant to which the offering is being made, (b) the number of authorized but unissued shares of our common stock, or (c) the number or dollar amount of shares of common stock that would cause the Company or the offering of the shares to not satisfy the eligibility and transaction requirements for use of Form S-3, including, if applicable, General Instruction I.B.6 of Registration Statement on Form S-3.

Each time we wish to issue and sell our shares of common stock under the Sales Agreement, we will notify HCW of the number of shares to be issued, the dates on which such sales are anticipated to be made, any limitation on the number of shares to be sold in any one day and any minimum price below which sales may not be made. Once we have so instructed HCW, unless HCW declines to accept the terms of such notice in accordance with the Sales Agreement, HCW has agreed to use its reasonable best efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of HCW under the Sales Agreement to sell our shares of common stock are subject to a number of conditions that we must meet. We or HCW may suspend the offering of shares of common stock being made through HCW under the Sales Agreement upon proper notice to the other party.

The settlement of sales of shares between us and HCW is generally anticipated to occur on the first trading day following the date on which the sale was made. Sales of our shares of common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and HCW may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay HCW a commission equal to 3.0% of the aggregate gross proceeds we receive from each sale of our shares of common stock by HCW. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. In addition, we have agreed to reimburse HCW for the fees and disbursements of its counsel, payable upon execution of the Sales Agreement, in an amount not to exceed $50,000, in addition to up to $5,000 per "Representation Date" in connection with ongoing diligence arising from the transactions contemplated by the Sales Agreement. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares. We will report at least quarterly the number of shares of common stock sold through HCW under the Sales Agreement, the net proceeds to us and the compensation paid by us to HCW in connection with the sales of our common stock.

HCW is not required to sell any certain number of shares or dollar amount of our common stock, but will use its reasonable best efforts consistent with its normal trading and sales practices to sell on our behalf all of the shares of common stock requested to be sold by us, subject to the conditions set forth in the Sales Agreement. In connection with the sale of our shares of common stock on our behalf, HCW will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation HCW will be deemed to be underwriting commissions or discounts. We have agreed to indemnify HCW against certain civil liabilities, including liabilities under the Securities Act. We have also agreed to contribute to payments HCW may be required to make in respect of such liabilities. HCW will not engage in any market making activities involving shares of our common stock while the offering is ongoing under this prospectus if such activity would be prohibited under Regulation M or other anti-manipulation rules under the Securities Act. As our sales agent, HCW will not engage in any transactions that stabilizes shares of our common stock.

The offering of our shares of common stock pursuant to the Sales Agreement will terminate upon the termination of the Sales Agreement as permitted therein. The Company may terminate the Sales Agreement at any time upon ten business days' prior written notice to HCW. HCW may terminate the Sales Agreement at any time upon prior written notice to the Company.

HCW and its affiliates may in the future provide various investment banking, commercial banking, financial advisory and other financial services for us and our affiliates, for which services they may in the future receive customary fees. In the course of its business, HCW may actively trade our securities for its own account or for the accounts of customers, and, accordingly, HCW may at any time hold long or short positions in such securities. HCW acted as placement agent for the Company's private placement offering in March 2026 and was paid compensation, including placement agent warrants. Except as disclosed in this prospectus, we have no present arrangements with HCW for any services.

This prospectus supplement and the accompanying prospectus in electronic format may be made available on a website maintained by HCW, and HCW may distribute the prospectus supplement and the accompanying prospectus electronically.

The transfer agent and registrar for our common stock is Equiniti Trust Company, LLC. The transfer agent's principal business address is 28 Liberty Street, 53rd Floor, New York, NY 10005.

Our common stock is listed on Nasdaq under the symbol "ARTL."

## LEGAL MATTERS

The validity of the common stock offered by this prospectus supplement and the accompanying prospectus will be passed upon for us by Fennemore Craig, P.C. Ellenoff Grossman & Schole LLP is counsel for HCW in connection with this offering.

## EXPERTS

The consolidated financial statements of Artelo Biosciences, Inc. incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2025, and as updated on Form 8-K filed with the SEC on March 17, 2026, have been so incorporated in reliance on the report (which contains an explanatory paragraph regarding our ability to continue as a going concern) of MaloneBailey, LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of a Registration Statement on Form S-3 that we filed with the SEC registering the sale of the securities that may be offered and sold hereunder. This prospectus supplement, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, the exhibits filed therewith or the documents incorporated by reference therein. For further information about us and the securities offered hereby, reference is made to the registration statement, the exhibits filed therewith and the documents incorporated by reference therein. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and in each instance we refer you to the copy of such contract or other document filed as an exhibit to the registration statement.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.artelobio.com. Information accessible on or through our website is not a part of this prospectus.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information that we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus supplement is considered to be part of this prospectus supplement. Because we are incorporating by reference future filings with the SEC, this prospectus supplement is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus supplement. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus supplement or in any document previously incorporated by reference have been modified or superseded. This prospectus supplement incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents furnished pursuant to Items 2.02 or 7.01 of any Current Report on Form 8-K and, except as may be noted in any such Form 8-K, exhibits filed on such form that are related to such information), until the offering of the securities under the registration statement of which this prospectus supplement forms a part is terminated or completed:

- our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on February 24, 2026;
- our Quarterly Report on Form 10-Q for the period ended March 31, 2026, filed with the SEC on May 14, 2026;
- our Current Reports on Form 8-K filed on March 6, 2026, March 17, 2026, March 18, 2026, March 26, 2026, March 30, 2026, April 7, 2026 and May 15, 2026; and
- the description of our Common Stock contained in Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on February 24, 2026, including any amendment or report filed for the purpose of updating such description.

Any statement made in a document incorporated by reference into this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, at no cost, upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents. Requests should be directed to Artelo Biosciences, Inc., Attn: Chief Executive Officer, 505 Lomas Santa Fe, Suite 160, Solana Beach, California, 92075, or by calling us at (858) 925-7049.

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**PROSPECTUS**


**Artelo Biosciences, Inc.**

**$75,000,000**

**Common Stock**
**Preferred Stock**
**Debt Securities**
**Warrants**
**Units**

We may issue securities from time to time in one or more offerings, in amounts, at prices and on terms determined at the time of offering. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus, which will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement before you invest. The aggregate offering price of the securities we sell pursuant to this prospectus will not exceed $75,000,000.

The securities may be sold directly to you, through agents or through underwriters and dealers. If agents, underwriters or dealers are used to sell the securities, we will name them and describe their compensation in a prospectus supplement. The price to the public of those securities and the net proceeds we expect to receive from that sale will also be set forth in a prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market tier of The Nasdaq Capital Market LLC ("Nasdaq") under the symbol "ARTL." On May 1, 2026, the last reported sale price of our common stock on Nasdaq was $3.39 per share. Each prospectus supplement will indicate whether the securities offered thereby will be listed on any securities exchange.

As of May 1, 2026, the aggregate market value of our outstanding common stock held by non-affiliates was $22,988,288.08 based upon 2,182,540 shares of common stock outstanding, of which 2,181,052 shares were held by non-affiliates, and the last reported sale price of our common stock of $10.54 per share on March 27, 2026. Pursuant to General Instruction I.B.6. of Form S-3, in no event will we sell securities pursuant to this prospectus having a value exceeding more than one-third of the aggregate market value of our outstanding common stock held by non-affiliates in any 12-month period so long as the aggregate market value of our outstanding common stock held by non-affiliates remains below $75 million. In the event that subsequent to the date of this prospectus the aggregate market value of our outstanding common stock held by non-affiliates equals or exceeds $75 million, such one-third limitation on sales shall not apply to sales subsequently made pursuant to this prospectus. During the 12-calendar month period ending on, and including the date of this prospectus, we sold securities with an aggregate market value of $5,706,345.75 pursuant to General Instruction I.B.6. of Form S-3.

**Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 6 of this prospectus, in any applicable prospectus supplement, and in the documents incorporated by reference into this prospectus, before you make an investment decision.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

**The date of this prospectus is May 19, 2026.**

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## ABOUT THIS PROSPECTUS

As used in this prospectus, unless the context otherwise requires or indicates, references to "the Company," "our company," "we," "our," "ourselves," "us" and "Artelo" refer to Artelo Biosciences, Inc.

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the "SEC"), using a "shelf" registration process. Under this shelf registration process, we may from time to time sell any combination of the securities described in this prospectus in one or more offerings for an aggregate offering price up to $75,000,000.

This prospectus provides you with a general description of the securities that may be offered. Each time we sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any applicable prospectus supplement together with the additional information described in the sections of this prospectus titled "Where You Can Find More Information" and "Incorporation of Certain Information by Reference."

You should rely only on the information contained in or incorporated by reference in this prospectus and any applicable prospectus supplement. We have not authorized anyone to provide you with different or additional information. If anyone provides you with different or inconsistent information, you should not rely on it. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of securities described in this prospectus. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus and the accompanying prospectus supplement is accurate on any date subsequent to the date set forth on the front of the document or that any information that we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus and the documents incorporated by reference in this prospectus may contain market data that we obtain from industry sources. These sources do not guarantee the accuracy or completeness of the information. Although we believe that our industry sources are reliable, we do not independently verify the information. The market data may include projections that are based on a number of other projections. While we believe these assumptions to be reasonable and sound as of the date of this prospectus, actual results may differ from the projections.

## FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement may contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "could," "would," "project," "plan," "potentially," "likely," and similar expressions and variations thereof are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and include statements regarding the intent, belief or current expectations of our management that are subject to known and unknown risks, uncertainties and assumptions. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those projected in the forward-looking statements as a result of various factors.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

## PROSPECTUS SUMMARY

*This summary highlights selected information contained elsewhere in or incorporated by reference into this prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our securities. This summary is qualified in its entirety by the more detailed information included in or incorporated by reference into this prospectus and any applicable prospectus supplement and the other documents incorporated by reference into this prospectus. You should carefully read the entire prospectus and the other documents incorporated by reference into this prospectus, including the risks associated with an investment in our company discussed in the "Risk Factors" section of this prospectus, any applicable prospectus supplement, and documents referred to in "Where You Can Find More Information" and "Incorporation of Certain Information by Reference," before making an investment decision. Some of the statements in this prospectus and the other documents incorporated by reference into this prospectus are forward-looking statements. See the section titled "Forward-Looking Statements."*

**Company Overview**

We incorporated in the State of Nevada on May 2, 2011, and are presently based in the County of San Diego, California. We are a clinical stage biopharmaceutical company focused on the development and commercialization of therapeutics that target lipid-signaling modulation pathways, including the endocannabinoid system (the "ECS"), a network of receptors and neurotransmitters that form a biochemical communication system throughout the body.

Our product candidate pipeline broadly leverages leading scientific methodologies and balances risk across mechanisms of action and stages of development. Our programs represent a comprehensive approach in utilizing the power and promise of lipid signaling to develop pharmaceuticals for patients with unmet healthcare needs.

We are currently developing a novel, benzimidazole dual cannabinoid (CB) agonist that targets both the CB1 and CB2 peripheral receptors. This synthetic small molecule program is a G protein-coupled receptor ("GPCR") designated ART27.13 and was initially developed by AstraZeneca plc. We are developing ART27.13 as a potential treatment for cancer-related anorexia and it is currently in a Phase 1b/2a trial, titled the Cancer Appetite Recovery Study ("CAReS"). In an interim analysis of the on-going Phase 2a CAReS trial, patients with cancer anorexia receiving ART27.13 demonstrated a mean weight gain of over 6% compared to a 5% loss in the placebo group, while maintaining a safety profile similar to the Phase 1b despite doses up to twice the previous maximum. Currently there is no FDA approved treatment for cancer anorexia cachexia syndrome.

Our second program, ART26.12 is a small molecule and the lead product candidate from our chemical library of inhibitors of fatty acid binding proteins, notably Fatty Acid Binding Protein 5 ("FABP5"). We received U.S. Food & Drug Administration (the "FDA") clearance for our Investigational New Drug ("IND") application for ART26.12 in July 2024 and have completed enrolment to a Phase 1 clinical trial in healthy subjects to support the development towards an agent intended to treat chemotherapy-induced peripheral neuropathy ("CIPN"). In addition, ART26.12 may have broad applications as a cancer therapeutic, as a treatment for dermatologic conditions, such as psoriasis, as a treatment for pain and inflammation, and potential use in anxiety-related disorders, including post-traumatic stress disorder. In June 2025, we announced favorable results from our first-in-human study evaluating ART26.12. The Phase 1 Single Ascending Dose (SAD) study was designed to assess the safety, tolerability, and pharmacokinetics of ART26.12 in healthy volunteers and enrolled 49 subjects. All adverse events (AEs) were mild, transient, and self-resolving. No drug-related AEs were observed in the blinded dataset, and no tolerability issues or safety signals were detected across multiple assessments (vital signs, ECGs, clinical laboratory tests, physical examinations, and visual analogue mood scales). In addition, full dose-exposure profiles were successfully explored. Plasma analysis confirmed dose-dependent, linear absorption across the evaluated range. A wide safety margin was observed between estimated therapeutic plasma concentrations and the highest exposure levels achieved, supporting potential titration for maximum efficacy in future studies. In addition to ART26.12 in CIPN, our extensive library of small molecule inhibitors of Fatty Acid Binding Proteins ("FABPs") has shown therapeutic potential for the treatment of certain cancers, neuropathic and nociceptive pain, psoriasis, and anxiety disorders.

ART12.11 is our wholly owned, proprietary cocrystal composition of cannabidiol (CBD) and tetramethylpyrazine (TMP). Isolated as a single crystalline form, ART12.11 has exhibited better pharmacokinetics and improved efficacy compared to other forms of CBD in nonclinical studies. Greatly enhanced pharmaceutical properties, including physicochemical, pharmacokinetic, and pharmacodynamic advantages have been observed with ART12.11. We believe a more consistent and improved bioavailability profile may ultimately lead to increased safety and efficacy in humans, thus making ART12.11 a preferred CBD pharmaceutical composition. The U.S. issued composition of matter patent for ART12.11 is enforceable until December 10, 2038 and has now been granted or validated in 21 additional countries.

We obtained two of our patent protected product candidates through our in-licensing activities. Our first in-licensed program, ART27.13, is being developed for cancer-related anorexia. ART27.13 is a peripherally-selective high-potency dual CB1 and CB2 full-receptor agonist, which was originally invented at AstraZeneca plc. We exercised our option to exclusively license this product candidate through the NEOMED Institute ("NEOMED"), a Canadian not-for-profit corporation, renamed adMare Bioinnovations ("adMare") in June 2019, which had obtained rights to ART27.13 from AstraZeneca plc. In Phase 1, single dose studies in healthy volunteers and a multiple ascending dose study in individuals with chronic low back pain conducted by AstraZeneca plc, ART27.13 exhibited an attractive pharmacokinetic and absorption, distribution, metabolism, and excretion profile and was well tolerated within the target exposure range. It also exhibited dose-dependent and potentially clinically meaningful increases in body weight. Importantly, the changes in body weight were not associated with fluid retention or other adverse effects and occurred at exposures without central nervous system ("CNS") side effects. Discussions with United Kingdom ("UK"), U.S. and Canadian regulators indicated there is a potential pathway for development of ART27.13 for the treatment of cancer-related anorexia, which affects approximately 60% of advanced stage cancer patients.

We commenced enrollment and dosed the first patient in CAReS, our Phase 1b/2a clinical study of cancer-related anorexia with ART27.13 in April 2021 and completed enrolling patients in the Phase 1b during the first quarter of 2023. Data from the Phase 1b stage was used to determine the most effective and safe dose selected as the starting dose for the Phase 2a portion of CAReS. We received approval from the regulatory authorities in the UK, Ireland and Norway to increase the daily dose from the starting dose of 650 micrograms to 1,000 micrograms after 4 weeks and up to 1,300 micrograms initiated at 8 weeks in patients for whom intra-patient dose escalation is expected to be well tolerated. We also received approval from the regulatory authorities to enroll 40 evaluable patients into the Phase 2a stage with a 3:1 randomization of ART27.13 to placebo. We initiated the Phase 2a portion of CAReS during April 2023 with 18 clinical sites across five countries.

As of December 31, 2025, 32 participants have been enrolled. On September 3, 2025, we announced interim results from the Phase 2a CAReS trial. In the interim analysis, 18 evaluable patients-primarily with lung and gastrointestinal cancers not receiving cyclic chemotherapy-were included. After 12 weeks of treatment in patients who were titrated to the top dose evaluated of 1300 micrograms (n=5), ART27.13 demonstrated compelling increases in mean body weight of 6.38% (Standard Deviation or SD 9.50) compared to patients on placebo (n=6) who lost -5.42% (SD 8.17). The maximum weight gain in the ART27.13 group reached 18.5%, versus only 0.4% in placebo. The maximum weight loss in the placebo arm was -17.4%, compared to just -3.0% in the ART27.13 group. Additional benefits were seen in lean body mass, with a +4.23% increase (SD 5.37) in the treatment group versus a -3.15% loss (SD 4.89) in placebo at one month, as well as qualitative improvements in total and weekly activity scores.

Safety results were consistent with prior findings. Among the 32 participants enrolled in the CAReS Phase 2 trial to date, 7 patients (22%) experienced adverse events that may be related to ART27.13. All were mild or moderate, with the exception of a single case of severe malaise, and no drug-related serious adverse events were reported. These data are aligned with safety outcomes observed in Phase 1 of CAReS, supporting ART27.13's overall favorable tolerability and acceptable safety profile.

Our second in-licensed patented program is being advanced from our platform of small-molecule inhibitors of FABPs, notably FABP5. FABPs are attractive therapeutic targets, however, the high degree of sequence and structural similarities among family members made the creation of drugs targeting specific FABPs challenging. FABP5 is believed to specifically target and regulate one of the body's endogenous cannabinoids, anandamide ("AEA"). While searching for a FABP5 inhibitor to regulate AEA, researchers at Stony Brook University ("SBU") discovered the chemistry for creating a large library of compounds which we believe to be highly specific and potent small molecule inhibitors of FABP5 and other isoforms. We licensed the rights to world-wide intellectual property in all fields and certain know-how to these inhibitors from SBU.

Our lead FABP5 inhibitor program is designated ART26.12. Preclinical research with ART26.12 showed evidence of activity in multiple pain models including osteoarthritis, cancer bone pain, and neuropathic pain. Based upon positive preclinical evidence from five separate studies showing promising activity and a differentiated mechanism-of-action for the prevention and treatment of painful neuropathies, including diabetic neuropathy and CIPN, we prioritized CIPN as the initial indication for development of ART26.12. Treatment and/or prevention of CIPN is a significant unmet need, often resulting in anti-cancer treatment delays or discontinuations, and there are currently no approved treatments for CIPN by the regulatory authorities in the U.S., UK or EU. We submitted an IND application for ART26.12 to the FDA on June 10, 2024 and received a study may proceed notice from the FDA on July 8, 2024. First-in-human studies for ART26.12 began in Q4 of 2024 and we successfully completed dosing all 48 healthy volunteers planned for the Phase 1 Single Ascending Dose study at the end of April 2025. In addition to its potential as a synthetic endocannabinoid modulator with development targeting pain, inflammation, dermatologic conditions such as psoriasis, FABP5 is understood to play an important role in lipid signaling and is believed to be an attractive strategy for drug development in oncology. Large amounts of human biomarker and animal model data support FABP5 as an oncology target, including triple negative breast cancer, ovarian cancer, cervical cancer, and castration-resistant prostate cancer. Through our sponsored research we have also subsequently identified a potential role for FABP5 inhibition to treat anxiety disorders, such as Post Traumatic Stress Disorder ("PTSD"). We have been awarded a research grant in Canada to expand on our earlier research at the University of Western Ontario in this new development area.

In addition to our in-licensed programs, we have internal discovery research initiatives which resulted in ART12.11, a proprietary cocrystal composition of CBD and TMP. The crystal structure of CBD is known to exhibit solid polymorphism, or the ability to manifest in different forms. Polymorphism can adversely affect stability, dissolution, and bioavailability of a drug product and thus may affect its quality, safety, and efficacy. Based upon our research, we believe our CBD cocrystal exists as a single crystal form and as such is anticipated to have advantages over other solid forms of CBD that exhibit polymorphism. Emerging data demonstrates potential advantages of this single crystal structure, including improved stability, solubility, and a more consistent absorption profile. We believe these features have contributed to a more consistent and improved bioavailability and pharmacokinetic profile which may ultimately lead to improved safety and efficacy in human therapeutics, as already demonstrated in animal studies.

Presently, we have two U.S. patents, one pending U.S. patent application, seven foreign patents (Australia, Brazil, China, Mexico, Japan, Taiwan, and Europe, including validation in 15 countries) and two pending foreign patent applications (Canada and South Korea) directed to our cocrystal composition of CBD. Composition claims are generally known in the pharmaceutical industry as the most desired type of intellectual property and should provide for long lasting market exclusivity for our synthetic CBD cocrystal drug product candidate. In addition, due to the reasons outlined above, we believe that our synthetic CBD cocrystal will continue to demonstrate a superior set of pharmaceutical properties compared to non-cocrystal CBD compositions. We plan to develop ART12.11 for multiple potential indications where CBD has shown activity of such anxiety disorders, including PTSD, depression, and other possible uses such as epilepsy and insomnia.

We are developing our product candidates in accordance with traditional regulated drug development standards and expect to make them available to patients via prescription or physician orders only after obtaining marketing authorization from a country's regulatory authority, such as the FDA. Our management team has experience developing, commercializing, and partnering ethical pharmaceutical products, including several first-in-class therapeutics. Based upon our current management's capabilities and the future talent we may attract, we plan to retain the option to internally develop and commercialize our programs; however, we may explore collaborations with partners in the biopharmaceutical industry when a partnering strategy serves to maximize value for our stockholders.

**Corporate Information**

We were incorporated in the State of Nevada on May 2, 2011, as Knight Knox Development Corp. On January 19, 2017, we changed our name to Reactive Medical, Inc. and on April 14, 2017, we changed our name to Artelo Biosciences, Inc. Our principal executive office is located at 505 Loma Santa Fe, Suite 160, Solana Beach, California 92075 and our telephone number is (858) 925-7049. Our corporate website address is www.artelobio.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus.

**The Securities That May Be Offered**

We may offer or sell common stock, preferred stock, debt securities, warrants and units in one or more offerings and in any combination. The aggregate offering price of the securities we sell pursuant to this prospectus will not exceed $75,000,000. Each time securities are offered with this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and terms of the securities being offered and the net proceeds we expect to receive from that sale.

The securities may be sold to or through underwriters, dealers or agents or directly to purchasers or as otherwise set forth in the section of this prospectus titled "Plan of Distribution." Each prospectus supplement will set forth the names of any underwriters, dealers, agents or other entities involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

***Common Stock***

We may offer shares of our common stock, par value $0.001 per share, either alone or underlying other registered securities that are exercisable or convertible into our common stock.

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds. We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends on our common stock in the near future. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant.

***Preferred Stock***

Our board of directors has the authority, subject to limitations prescribed by Nevada law, to issue preferred stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further vote or action by our stockholders. Each series of preferred stock offered by us will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or winding up, voting rights and rights to convert into common stock.

***Debt Securities***

We may offer secured or unsecured obligations in the form of one or more series of senior or subordinated debt. The senior debt securities and the subordinated debt securities are together referred to in this prospectus as the "debt securities." The subordinated debt securities generally will be entitled to payment only after payment of our senior debt. Senior debt generally includes all debt for money borrowed by us, except debt that is stated in the instrument governing the terms of that debt to be not senior to, or to have the same rank in right of payment as, or to be expressly junior to, the subordinated debt securities. We may issue debt securities that are convertible into shares of our common stock.

The debt securities will be issued under an indenture between us and a trustee to be identified in an accompanying prospectus supplement. We have summarized the general features of the debt securities to be governed by the indenture in this prospectus and the form of indenture has been filed as an exhibit to the registration statement of which this prospectus forms a part. We encourage you to read the indenture.

***Warrants***

We may offer warrants for the purchase of common stock, preferred stock or debt securities. We may offer warrants independently or together with other securities.

***Units***

We may offer units comprised of one or more of the other classes of securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit.

## RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the section in the applicable prospectus supplement titled "Risk Factors," together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed in the sections entitled "Risk Factors" contained in our most recent Annual Report on Form 10-K filed with the SEC, and in any applicable prospectus supplement, subsequent Quarterly Reports on Form 10-Q, and our other filings with the SEC and incorporated by reference in this prospectus or any applicable prospectus supplement, together with all of the other information contained in this prospectus or any applicable prospectus supplement. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

## USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds to us from the sale of our securities under this prospectus. Except as described in any prospectus supplement and any free writing prospectus in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered by us under this prospectus for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license or invest in technologies, products and/or businesses that we believe will enhance the value of our company; however, we currently have no agreements or commitments to complete any such transaction. Depending on future events and others changes in the business climate, we may determine at a later time to use the net proceeds for different purposes. Pending these uses, we plan to invest the net proceeds of this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

## DESCRIPTION OF CAPITAL STOCK

The description of our capital stock is incorporated by reference to Exhibit 4.1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2025 filed with the SEC on February 24, 2026.

## DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes certain general terms and provisions of the debt securities that we may offer under this prospectus. When we offer to sell a particular series of debt securities, we will describe the specific terms of the series in a supplement to this prospectus. We will also indicate in the supplement to what extent the general terms and provisions described in this prospectus apply to a particular series of debt securities.

We may issue debt securities either separately, or together with, or upon the conversion or exercise of or in exchange for, other securities described in this prospectus. Debt securities may be our senior, senior subordinated or subordinated obligations and, unless otherwise specified in a supplement to this prospectus, the debt securities will be our direct, unsecured obligations and may be issued in one or more series.

The debt securities will be issued under an indenture between us and a trustee to be identified in an accompanying prospectus supplement. We have summarized select portions of the indenture below. The summary is not complete. The form of the indenture has been filed as an exhibit to the registration statement of which this prospectus forms a part and you should read the indenture for provisions that may be important to you. In the summary below, we have included references to the section numbers of the indenture so that you can easily locate these provisions. Capitalized terms used in the summary and not defined herein have the meanings specified in the indenture.

**General**

The terms of each series of debt securities will be established by or pursuant to a resolution of our board of directors and set forth or determined in the manner provided in a resolution of our board of directors, in an officer's certificate or by a supplemental indenture. The particular terms of each series of debt securities will be described in a prospectus supplement relating to such series (including any pricing supplement or term sheet).

We can issue an unlimited amount of debt securities under the indenture that may be in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will set forth in a prospectus supplement (including any pricing supplement or term sheet) relating to any series of debt securities being offered the aggregate principal amount and the following terms of the debt securities, if applicable:

- the title and ranking of the debt securities (including the terms of any subordination provisions);
- the price or prices (expressed as a percentage of the principal amount) at which we will sell the debt securities;
- any limit upon the aggregate principal amount of the debt securities;
- the date or dates on which the principal of the securities of the series is payable;
- the rate or rates (which may be fixed or variable) per annum or the method used to determine the rate or rates (including any commodity, commodity index, stock exchange index or financial index) at which the debt securities will bear interest, the date or dates from which interest will accrue, the date or dates on which interest will commence and be payable and any regular record date for the interest payable on any interest payment date;
- the right, if any, to defer payments of interest and the maximum length of such deferral period;
- the place or places where principal of, and interest, if any, on the debt securities will be payable (and the method of such payment), where the securities of such series may be surrendered for registration of transfer or exchange, and where notices and demands to us in respect of the debt securities may be delivered;
- the period or periods within which, the price or prices at which and the terms and conditions upon which we may redeem the debt securities, in whole or in part, at our option, and the manner in which any election by us to redeem the debt securities will be evidenced;

- any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund or analogous provisions or at the option of a holder of debt securities and the period or periods within which, the price or prices at which and the terms and conditions upon which securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

- the provisions, if any, relating to conversion or exchange of any debt securities of such series, including if applicable, the conversion or exchange price, the conversion or exchange period, provisions as to whether conversion or exchange will be mandatory, at the option of the holders thereof or at our option, the events requiring an adjustment of the conversion price or exchange price and provisions affecting conversion or exchange if such series of debt securities are redeemed;

- the dates on which and the price or prices at which we will repurchase debt securities at the option of the holders of debt securities and other detailed terms and provisions of these repurchase obligations;

- the denominations in which the debt securities will be issued, if other than denominations of $1,000 and any integral multiple thereof;

- whether the debt securities will be issued in the form of certificated debt securities or global debt securities (including the terms pertaining to the exchange of any such securities);

- the portion of principal amount of the debt securities payable upon declaration of acceleration of the maturity date, if other than the principal amount;

- the currency of denomination of the debt securities, which may be United States dollars or any foreign currency, and if such currency of denomination is a composite currency, the agency or organization, if any, responsible for overseeing such composite currency;

- the designation of the currency, currencies or currency units in which payment of principal of, premium and interest on the debt securities will be made;

- if payments of principal of, premium or interest on the debt securities will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to these payments will be determined;

- the manner in which the amounts of payment of principal of, premium, if any, or interest on the debt securities will be determined, if these amounts may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index;

- any provisions relating to any security provided for the debt securities;

- any addition to, deletion of or change in the events of default described in this prospectus or in the indenture with respect to the debt securities and any change in the acceleration provisions described in this prospectus or in the indenture with respect to the debt securities;

- any addition to, deletion of or change in the covenants described in this prospectus or in the indenture with respect to the debt securities;

- any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents with respect to the debt securities;

- if there is more than one trustee or a different trustee, the identity of the trustee and, if not the trustee, the identity of each security registrar, paying agent or authenticating agent with respect to such debt securities;

- any other terms of the debt securities, which may supplement, modify or delete any provision of the indenture as it applies to that series, including any terms that may be required under applicable law or regulations or advisable in connection with the marketing of the securities; and

- whether any of our direct or indirect subsidiaries will guarantee the debt securities of that series, including the terms of subordination, if any, of such guarantees.

We may issue debt securities that provide for an amount less than their stated principal amount to be due and payable upon declaration of acceleration of their maturity pursuant to the terms of the indenture. We will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

If we denominate the purchase price of any of the debt securities in a foreign currency or currencies or a foreign currency unit or units, or if the principal of and any premium and interest on any series of debt securities is payable in a foreign currency or currencies or a foreign currency unit or units, we will provide you with information on the restrictions, elections, general tax considerations, specific terms and other information with respect to that issue of debt securities and such foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

**Transfer and Exchange**

Each debt security will be represented by either one or more global securities registered in the name of a clearing agency registered under the Exchange Act, which we refer to as the depositary, or a nominee of the depositary (we will refer to any debt security represented by a global debt security as a "book-entry debt security"), or a certificate issued in definitive registered form (we will refer to any debt security represented by a certificated security as a "certificated debt security") as set forth in the applicable prospectus supplement. Except as set forth under the heading "Global Debt Securities and Book-Entry System" below, book-entry debt securities will not be issuable in certificated form.

***Certificated Debt Securities***

You may transfer or exchange certificated debt securities at any office we maintain for this purpose in accordance with the terms of the indenture. No service charge will be made for any transfer or exchange of certificated debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection with a transfer or exchange.

You may effect the transfer of certificated debt securities and the right to receive the principal of, premium and interest on certificated debt securities only by surrendering the certificate representing those certificated debt securities and either reissuance by us or the trustee of the certificate to the new holder or the issuance by us or the trustee of a new certificate to the new holder.

***Global Debt Securities and Book-Entry System***

Each global debt security representing book-entry debt securities will be deposited with, or on behalf of, the depositary, and registered in the name of the depositary or a nominee of the depositary.

**Covenants**

We will set forth in the applicable prospectus supplement any restrictive covenants applicable to any issue of debt securities.

**No Protection in the Event of a Change of Control**

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions which may afford holders of the debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control) which could adversely affect holders of debt securities.

**Consolidation, Merger and Sale of Assets**

We may not consolidate with or merge with or into, or convey, transfer or lease all or substantially all of our properties and assets to any person, which we refer to as a successor person, unless:

- we are the surviving corporation or the successor person (if other than us) is a corporation organized and validly existing under the laws of any U.S. domestic jurisdiction and expressly assumes our obligations on the debt securities and under the indenture by a supplemental indenture, executed and delivered to the trustee; and

- immediately after giving effect to the transaction, no default or event of default, shall have occurred and be continuing.

Where we are not the surviving corporation, we shall deliver to the trustee prior to the consummation of the proposed transaction an officer's certificate to the foregoing effect and an opinion of counsel stating that the proposed transaction and any supplemental indenture comply with the indenture.

Notwithstanding the above, any of our subsidiaries may consolidate with, merge into or transfer all or part of its properties to us. Neither an officer's certificate nor an opinion of counsel shall be required to be delivered in connection therewith.

**Events of Default**

"Event of default" means with respect to any series of debt securities, any of the following:

- default in the payment of any interest upon any debt security of that series when it becomes due and payable, and continuance of such default for a period of 30 days (unless the entire amount of the payment is deposited by us with the trustee or with a paying agent prior to the expiration of the 30-day period);
- default in the payment of principal of any security of that series at its maturity;
- default in the performance or breach of any other covenant or warranty by us in the indenture (other than a covenant or warranty that has been included in the indenture solely for the benefit of a series of debt securities other than that series), which default continues uncured for a period of 60 days after we receive written notice from the trustee, or we and the trustee receive written notice from the holders of not less than 25% in principal amount of the outstanding debt securities of that series as provided in the indenture;
- certain voluntary or involuntary events of bankruptcy, insolvency or reorganization of us; and
- any other event of default provided with respect to debt securities of that series that is described in the applicable prospectus supplement.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain indebtedness of ours or our subsidiaries outstanding from time to time.

We will provide the trustee written notice of any default or event of default within 30 days of becoming aware of the occurrence of such default or event of default, which notice will describe in reasonable detail the status of such default or event of default and what action we are taking or propose to take in respect thereof.

If an event of default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than 25% in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the trustee if given by the holders), declare to be due and payable immediately the principal of (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) and accrued and unpaid interest, if any, on all debt securities of that series. In the case of an event of default resulting from certain events of bankruptcy, insolvency or reorganization, the principal (or such specified amount) of and accrued and unpaid interest, if any, on all outstanding debt securities will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holder of outstanding debt securities. At any time after a declaration of acceleration with respect to debt securities of any series has been made, but before a judgment or decree for payment of the money due has been obtained by the trustee, the holders of a majority in principal amount of the outstanding debt securities of that series may rescind and annul the acceleration if all events of default, other than the non-payment of accelerated principal and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the indenture. We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an event of default.

The indenture provides that the trustee may refuse to perform any duty or exercise any of its rights or powers under the indenture unless the trustee receives indemnity satisfactory to it against any cost, liability or expense which might be incurred by it in performing such duty or exercising such right or power. Subject to certain rights of the trustee, the holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

No holder of any debt security of any series will have any right to institute any proceeding, judicial or otherwise, with respect to the indenture or for the appointment of a receiver or trustee, or for any remedy under the indenture, unless:

- that holder has previously given to the trustee written notice of a continuing event of default with respect to debt securities of that series; and
- the holders of not less than 25% in principal amount of the outstanding debt securities of that series have made written request, and offered indemnity or security satisfactory to the trustee, to the trustee to institute the proceeding as trustee, and the trustee has not received from the holders of not less than a majority in principal amount of the outstanding debt securities of that series a direction inconsistent with that request and has failed to institute the proceeding within 60 days.

Notwithstanding any other provision in the indenture, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal of, premium and any interest on that debt security on or after the due dates expressed in that debt security and to institute suit for the enforcement of payment.

The indenture requires us, within 120 days after the end of our fiscal year, to furnish to the trustee a statement as to compliance with the indenture. If a default or event of default occurs and is continuing with respect to the securities of any series and if it is known to a responsible officer of the trustee, the trustee shall send to each securityholder of the securities of that series notice of a default or event of default within 90 days after it occurs or, if later, after a responsible officer of the trustee has knowledge of such default or event of default. The indenture provides that the trustee may withhold notice to the holders of debt securities of any series of any default or event of default (except in payment on any debt securities of that series) with respect to debt securities of that series if the trustee determines in good faith that withholding notice is in the interest of the holders of those debt securities.

**Modification and Waiver**

We and the trustee may modify, amend or supplement the indenture or the debt securities of any series without the consent of any holder of any debt security:

- to cure any ambiguity, defect or inconsistency;
- to comply with covenants in the indenture described above under the heading “Consolidation, Merger and Sale of Assets”;
- to provide for uncertificated securities in addition to or in place of certificated securities;
- to add guarantees with respect to debt securities of any series or secure debt securities of any series;
- to surrender any of our rights or powers under the indenture;
- to add covenants or events of default for the benefit of the holders of debt securities of any series;
- to comply with the applicable procedures of the applicable depositary;
- to make any change that does not adversely affect the rights of any holder of debt securities;
- to provide for the issuance of and establish the form and terms and conditions of debt securities of any series as permitted by the indenture;
- to effect the appointment of a successor trustee with respect to the debt securities of any series and to add to or change any of the provisions of the indenture to provide for or facilitate administration by more than one trustee;
- to comply with requirements of the SEC in order to effect or maintain the qualification of the indenture under the Trust Indenture Act;
- to add to, change or eliminate any provision of the indenture or the debt securities of such series in accordance with the Trust Indenture Act, or to comply with the provisions of DTC, Euroclear or Clearstream or the trustee with respect to provisions of the indenture or the debt securities of such series relating to transfers or exchanges of the debt securities of such series or beneficial interests in the debt securities of such series; or
- to conform any provision of the indenture, insofar as it relates to the debt securities of such series, to the description of the debt securities of such series in the prospectus supplement relating to the offering of the debt securities of such series.

We may also modify and amend the indenture with the consent of the holders of at least a majority in principal amount of the outstanding debt securities of each series affected by the modifications or amendments. We may not make any modification or amendment without the consent of the holders of each affected debt security then outstanding if that amendment will:

- reduce the amount of debt securities whose holders must consent to an amendment, supplement or waiver;
- reduce the rate of or extend the time for payment of interest (including default interest) on any debt security;
- reduce the principal of or premium on or change the fixed maturity of any debt security or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation with respect to any series of debt securities;
- reduce the principal amount of discount securities payable upon acceleration of maturity;
- waive a default or event of default in the payment of the principal of, premium or interest, if any, on any debt security (except a rescission of acceleration of the debt securities of any series by the holders of at least a majority in aggregate principal amount of the then outstanding debt securities of that series and a waiver of the payment default that resulted from such acceleration);
- make the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security;
- make any change to certain provisions of the indenture relating to, among other things, the right of holders of debt securities to receive payment of the principal of, premium and interest on those debt securities and to institute suit for the enforcement of any such payment and to waivers or amendments; or
- waive a redemption payment with respect to any debt security, provided that such redemption is made at our option.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series may on behalf of the holders of all debt securities of that series waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may on behalf of the holders of all the debt securities of such series waive any past default under the indenture with respect to that series and its consequences, except a default in the payment of the principal of, premium or any interest on any debt security of that series; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

**Defeasance of Debt Securities and Certain Covenants in Certain Circumstances**

***Legal Defeasance***

The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, we will be deemed to have paid and discharged the entire indebtedness on all the outstanding debt securities of any series on the 91st day after the date of the irrevocable deposit with the trustee, in trust, of money and/or U.S. government obligations or, in the case of debt securities denominated in a single currency other than U.S. dollars, government obligations of the government that issued or caused to be issued such currency, that, through the payment of interest and principal in accordance with their terms, will provide money or U.S. government obligations in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal, premium and interest on and any mandatory sinking fund payments in respect of the debt securities of that series on the stated maturity of those payments in accordance with the terms of the indenture and those debt securities.

This discharge may occur only if, among other things, we have delivered to the trustee (i) an officer's certificate and an opinion of counsel stating that we have received from, or there has been published by, the United States Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit, defeasance and discharge and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit, defeasance and discharge had not occurred, (ii) an officer's certificate stating that the deposit was not made with the intent of defeating, hindering, delaying or defrauding any other creditors, and (iii) an officer's certificate and an opinion of counsel, each stating that all conditions precedent relating to the defeasance have been complied with.

***Defeasance of Certain Covenants***

The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, upon compliance with certain conditions:

- we may omit to comply with the covenant described under the heading "Consolidation, Merger and Sale of Assets" and certain other covenants set forth in the indenture, including with respect to SEC reports, compliance certificates and stay, extension and usury laws, as well as any additional covenants which may be set forth in the applicable prospectus supplement; and

- any omission to comply with those covenants will not constitute a default or an event of default with respect to the debt securities of that series.

We refer to this as covenant defeasance. The conditions include:

- depositing with the trustee money and/or U.S. government obligations or, in the case of debt securities denominated in a single currency other than U.S. dollars, government obligations of the government that issued or caused to be issued such currency, that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal of, premium and interest on and any mandatory sinking fund payments in respect of the debt securities of that series on the stated maturity of those payments in accordance with the terms of the indenture and those debt securities;

- such deposit will not result in a breach or violation of, or constitute a default under the indenture or any other agreement to which we are a party;

- no default or event of default with respect to the applicable series of debt securities shall have occurred or is continuing on the date of such deposit;

- delivering to the trustee an officer's certificate and opinion of counsel to the effect that we have received from, or there has been published by, the United States Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit and related covenant defeasance and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit and related covenant defeasance had not occurred;

- delivering to the trustee an officer's certificate stating that the deposit was not made with the intent of defeating, hindering, delaying or defrauding any other creditors; and

- delivering to the trustee an officer's certificate and an opinion of counsel, each stating that all conditions precedent relating to the covenant defeasance have been complied with.

**No Personal Liability of Directors, Officers, Employees or Stockholders**

None of our past or present directors, officers, employees or stockholders, as such, will have any liability for any of our obligations under the debt securities or the indenture or for any claim based on, or in respect or by reason of, such obligations or their creation. By accepting a debt security, each holder waives and releases all such liability. This waiver and release is part of the consideration for the issue of the debt securities. However, this waiver and release may not be effective to waive liabilities under U.S. federal securities laws, and it is the view of the SEC that such a waiver is against public policy.

**Governing Law**

The indenture and the debt securities, including any claim or controversy arising out of or relating to the indenture or the securities, will be governed by the laws of the State of New York.

The indenture will provide that we, the trustee and the holders of the debt securities (by their acceptance of the debt securities) irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to the indenture, the debt securities or the transactions contemplated thereby.

The indenture will provide that any legal suit, action or proceeding arising out of or based upon the indenture or the transactions contemplated thereby may be instituted in the federal courts of the United States of America located in the City of New York or the courts of the State of New York in each case located in the City of New York, and we, the trustee and the holder of the debt securities (by their acceptance of the debt securities) irrevocably submit to the non-exclusive jurisdiction of such courts in any such suit, action or proceeding. The indenture will further provide that service of any process, summons, notice or document by mail (to the extent allowed under any applicable statute or rule of court) to such party's address set forth in the indenture will be effective service of process for any suit, action or other proceeding brought in any such court. The indenture will further provide that we, the trustee and the holders of the debt securities (by their acceptance of the debt securities) irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the courts specified above and irrevocably and unconditionally waive and agree not to plead or claim any such suit, action or other proceeding has been brought in an inconvenient forum.

## DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of our common stock, preferred stock, or debt securities in one or more series. We may issue warrants independently or together with our common stock, preferred stock, or debt securities, and the warrants may be attached to or traded separate and apart from these securities. Each series of warrants will be issued under a warrant agreement all as set forth in the prospectus supplement. The applicable prospectus supplement or term sheet will describe the terms of the warrants offered thereby, any warrant agreement relating to such warrants and the warrant certificates, including but not limited to the following:

- the title of the warrants;
- the offering price or prices of the warrants, if any;
- the minimum or maximum amount of the warrants which may be exercised at any one time;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the number of securities, if any, with which such warrants are being offered and the number of such warrants being offered with each security;
- the date, if any, on and after which such warrants and the related securities, if any, will be transferable separately;
- the amount of securities purchasable upon exercise of each warrant and the price at which the securities may be purchased upon such exercise, and events or conditions under which the amount of securities may be subject to adjustment;
- the date on which the right to exercise such warrants shall commence and the date on which such right shall expire;
- the circumstances, if any, which will cause the warrants to be deemed to be automatically exercised;
- any material risk factors, if any, relating to such warrants;
- the identity of any warrant agent; and
- any other material terms of the warrants.

Prior to the exercise of any warrants, holders of such warrants will not have any rights of holders of the securities purchasable upon such exercise, including the right to receive payments of dividends or the right to vote such underlying securities. Prospective purchasers of warrants should be aware that material U.S. federal income tax, accounting and other considerations may be applicable to instruments such as warrants.

## DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The applicable prospectus supplement may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- any additional terms of the governing unit agreement.

The applicable prospectus supplement will describe the terms of any units. The preceding description and any description of units in the applicable prospectus supplement does not purport to be complete and is subject to and is qualified in its entirety by reference to the unit agreement and, if applicable, collateral arrangements and depositary arrangements relating to such units.

## PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus in any one or more of the following ways (or in any combination) from time to time:

- directly to investors, including through privately negotiated transactions, a specific bidding, auction or other process;
- to investors through agents;
- directly to agents;
- to or through underwriters or dealers;
- in "at the market" offerings, within the meaning of the Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market on an exchange or otherwise;
- through a combination of any such methods of sale; or
- through any other method permitted by applicable law and described in the applicable prospectus supplement.

The accompanying prospectus supplement will set forth the terms of the offering and the method of distribution and will identify any firms acting as underwriters, dealers or agents in connection with the offering, including:

- the names and addresses of any underwriters, dealers or agents;
- the purchase price of the securities and the proceeds to us from the sale, if any;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any underwriting discounts and other items constituting compensation to underwriters, dealers or agents;
- any public offering price, any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities offered in the prospectus supplement may be listed.

If underwriters are used in the sale, the underwriters will acquire the offered securities for their own account and may resell them from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The offered securities may be offered either to the public through underwriting syndicates represented by one or more managing underwriters or by one or more underwriters without a syndicate. Unless otherwise set forth in a prospectus supplement, the obligations of the underwriters to purchase any series of securities will be subject to certain conditions precedent and the underwriters will be obligated to purchase all of such series of securities if any are purchased. Only those underwriters identified in such prospectus supplement are deemed to be underwriters in connection with the securities offered in the prospectus supplement. Any underwritten offering may be on a best efforts or a firm commitment basis.

In connection with the sale of our securities, underwriters or agents may receive compensation (in the form of discounts, concessions or commissions) from us, or from purchasers of securities for whom they may act as agents. Underwriters may sell securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of our securities may be deemed to be "underwriters" as that term is defined in the Securities Act, and any discounts allowed or commissions paid, and any profit on the resale of the securities they realize may be deemed to be underwriting discounts and commissions under the Securities Act. Any person who may be deemed to be an underwriter will be identified, and the compensation received from us will be described, in the prospectus supplement. Maximum compensation to any underwriters, dealers or agents will not exceed any applicable Financial Industry Regulatory Authority, Inc. limitations.

Underwriters and agents may be entitled to indemnification by us against some civil liabilities, including liabilities under the Securities Act, or to contributions with respect to payments which the underwriters or agents may be required to make relating to these liabilities. Underwriters and agents may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

Unless otherwise specified in the related prospectus supplement, each series of securities will be a new issue with no established trading market, other than our common stock, which is listed on Nasdaq. Any common stock sold pursuant to a prospectus supplement will be listed on Nasdaq, subject to official notice of issuance. We may elect to list any series of debt securities on an exchange, but we are not obligated to do so. It is possible that one or more underwriters may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. No assurance can be given as to the liquidity of, or the trading market for, any offered securities.

The aggregate proceeds to us from the sale of our common stock will be the purchase price of our common stock less discounts or commissions, if any. We reserve the right to accept and, together with our agents from time to time, to reject, in whole or in part, any proposed purchase of our common stock to be made directly or through agents.

To facilitate the offering of the common stock offered by us, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock. This may include over-allotments or short sales, which involve the sale by persons participating in the offering of more shares than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of our common stock by bidding for or purchasing shares in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if shares sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of our common stock at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

## LEGAL MATTERS

Except as otherwise set forth in the applicable prospectus supplement, the validity of any securities offered pursuant to this prospectus will be passed upon by Fennemore Craig, P.C. If legal matters in connection with offerings made pursuant to this prospectus are passed upon by counsel to underwriters, dealers or agents, such counsel will be named in the applicable prospectus supplement relating to any such offering.

## EXPERTS

The consolidated financial statements of Artelo Biosciences, Inc. incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2025, and as updated on Form 8-K filed with the SEC on March 17, 2026, have been so incorporated in reliance on the report (which contains an explanatory paragraph regarding our ability to continue as a going concern) of MaloneBailey, LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.artelobio.com. Information accessible on or through our website is not a part of this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiaries and the securities that we are offering. Forms of any indenture or other documents establishing the terms of the offered securities are filed as exhibits to the registration statement of which this prospectus forms a part or under cover of a Current Report on Form 8-K and incorporated in this prospectus by reference. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should read the actual documents for a more complete description of the relevant matters.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference much of the information that we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents furnished pursuant to Items 2.02 or 7.01 of any Current Report on Form 8-K and, except as may be noted in any such Form 8-K, exhibits filed on such form that are related to such information), including after the date of the initial registration statement of which this prospectus forms a part was filed and prior to effectiveness of the registration statement of which this prospectus forms a part, until the offering of the securities under the registration statement of which this prospectus forms a part is terminated or completed:

- our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on February 24, 2026;
- our Current Reports on Form 8-K filed on March 6, 2026, March 17, 2026, March 18, 2026, March 26, 2026, March 30, 2026, and April 7, 2026; and
- the description of our Common Stock contained in Exhibit 4.1 to our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on February 24, 2026, including any amendment or report filed for the purpose of updating such description.

Any statement made in a document incorporated by reference into this prospectus or any prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus or such prospectus supplement to the extent that a statement contained in this prospectus or such prospectus supplement modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus or such prospectus supplement.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, at no cost, upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents. Requests should be directed to Artelo Biosciences, Inc., Attn: Chief Executive Officer, 505 Lomas Santa Fe, Suite 160, Solana Beach, California, 92075, or by calling us at (858) 925-7049.


**$6,530,000**
**Common Stock**

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**PROSPECTUS SUPPLEMENT**

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**H.C. Wainwright & Co.**

**May 26, 2026**