

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Amendment No. 1 to

FORM S-1

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

Artelo Biosciences, Inc.

(Exact name of registrant as specified in its charter)

Nevada	7389	33-1220924
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

**505 Lomas Santa Fe, Suite 160
Solana Beach, CA USA
(858) 925-7049**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Gregory D. Gorgas
Chief Executive Officer and President
505 Lomas Santa Fe, Suite 160
Solana Beach, CA USA
(858) 925-7049**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period with any new or revised accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to such Section 8(a) may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities, and we are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

Subject to completion, dated March 23, 2026



Artelo Biosciences, Inc.

1,641,587 Shares of Common Stock or Pre-Funded Warrants to Purchase 1,641,587 Shares of Common Stock,

**Placement Agent Warrants to Purchase up to 131,327 Shares of Common Stock,
and**

Up to 1,772,914 Shares of Common Stock Underlying the Pre-Funded Warrants and Placement Agent Warrants

We are offering on a best efforts basis up to 1,641,587 shares of our common stock, par value \$0.001 per share, at an assumed public offering price of \$7.31, which was the last reported sale price of our common stock on The Nasdaq Capital Market tier of the Nasdaq Stock Market LLC ("Nasdaq") on March 18, 2026.

We are also offering to those purchasers, if any, whose purchase of shares of our common stock in this offering would otherwise result in such purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding shares of common stock immediately following the consummation of this offering, the opportunity to purchase, if any such purchaser so chooses, pre-funded warrants to purchase shares of common stock in lieu of shares of common stock that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding shares of common stock. The purchase price of each pre-funded warrant will be equal to the price per share of common stock being sold to the public in this offering, minus \$0.001, and the exercise price of each pre-funded warrant will be \$0.001 per share. The pre-funded warrants will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. For each pre-funded warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. The shares of common stock issuable from time to time upon exercise of the pre-funded warrants are also being offered by this prospectus.

Our common stock is listed on Nasdaq under the symbol "ARTL." The last reported sales price of our shares of common stock on March 18, 2026 was \$7.31 per share. The actual public offering price per share or per pre-funded warrant, as the case may be, will be determined between us, the placement agent and the investors in the offering, and may be at a discount to the current market price of our common stock. Therefore, the assumed public offering price used throughout this prospectus may not be indicative of the final offering price. There is no established public trading market for the pre-funded warrants, and we do not expect such a market to develop. In addition, we do not intend to apply for a listing of the pre-funded warrants on any national securities exchange or other nationally recognized trading system.

The shares of common stock and pre-funded warrants will be offered at a fixed price and are expected to be issued in a single closing. There is no minimum number of securities or minimum aggregate amount of proceeds for this offering to close. However, notwithstanding the foregoing, the shares of our common stock underlying any pre-funded warrants will be offered on a continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended. This offering will be completed not later than March 31, 2026, and we will deliver all securities to be issued in connection with this offering delivery versus payment or receipt versus payment, as the case may be, upon receipt of investor funds received by us. Accordingly, neither we nor the placement agent have made any arrangements to place investor funds in an escrow account or trust account since the placement agent will not receive investor funds in connection with the sale of the securities offered hereunder.

We have engaged Craft Capital Management LLC (the “placement agent” or “Craft Capital”) to act as our exclusive placement agent in connection with this offering. The placement agent has agreed to use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. The placement agent is not purchasing or selling any of the securities we are offering, and the placement agent is not required to arrange the purchase or sale of any specific number or dollar amount of securities. Because there is no minimum offering amount required as a condition to closing in this offering, the actual offering amount, placement agent’s fee and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts described throughout this prospectus. We have agreed to pay the placement agent, the placement agent fees set forth in the table below and to provide certain other compensation to the placement agent. See “*Plan of Distribution*” for more information regarding these arrangements.

We are a “smaller reporting company” as defined under the federal securities laws and, as such, we may continue to elect to comply with certain reduced public company reporting requirements in future reports.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 11 of this prospectus, as well as the risk factors contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2025, any subsequent Annual Reports on Form 10-K, any subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference into this prospectus.

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.

	Per Share	Per Pre-Funded Warrant	Total ⁽²⁾
Public offering price	\$	\$	\$
Placement agent fees ⁽¹⁾	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

- (1) The placement agent fees shall be 8.0% of the gross proceeds of the securities sold by us in this offering. In addition, we have agreed to issue to the placement agent, on the applicable closing date of this offering, warrants in an amount equal to 8.0% of the aggregate number of shares of common stock and pre-funded warrants sold by us in this offering (the “Placement Agent Warrants”). See “*Plan of Distribution*” for a description of compensation payable to the placement agent and “*Description of Securities–Placement Agent Warrants*” for additional information regarding the Placement Agent Warrants.
- (2) Because there is no minimum number of securities or amount of proceeds required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above. For more information, see “*Plan of Distribution*.”

Delivery of the securities offered hereby is expected to be made on or about [], 2026, subject to satisfaction of certain customary closing conditions.

Craft Capital Management LLC

The date of this prospectus is [], 2026

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ABOUT THIS PROSPECTUS

Unless the context clearly indicates otherwise, references in this prospectus to “we,” “our,” “ours,” “us,” the “Company” and “Artelo” refer to Artelo Biosciences, Inc.

This prospectus is part of a registration statement on Form S-1 that we filed with the Securities and Exchange Commission (the “SEC”) for the offering by us of our securities.

You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus, even though this prospectus is delivered or our securities registered under the registration statement of which this prospectus forms a part are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus in making your investment decision. You should also read and consider the information in the documents to which we have referred you under the captions “*Where You Can Find Additional Information*” in this prospectus.

Neither we nor the placement agent have authorized anyone to provide you with any information or to make any representations other than that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any of our securities other than the securities covered hereby. Neither we nor the placement agent are making an offer to sell securities in any jurisdiction in which the offer or sale is not permitted. The information in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our shares of common stock and the information in any free writing prospectus that we may provide to you in connection with this offering is accurate only as of the date of that free writing prospectus. Our business, financial condition, results of operations and prospects may have changed since those dates.

For investors outside the United States: We have not, and the placement agent has not, done anything that would permit this offering, or possession or distribution of this prospectus, in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

We obtained certain statistical data, market data and other industry data and forecasts used in this prospectus from publicly available information. While we believe that the statistical data, industry data, forecasts and market research are reliable, we have not independently verified the data, and we do not make any representation as to the accuracy of the information.

This prospectus contains forward-looking statements that are subject to a number of risks and uncertainties, many of which are beyond our control. Please read “*Special Note Regarding Forward- Looking Statements*” and “*Risk Factors*”.

SUMMARY

This summary is not complete and does not contain all of the information that you should consider before investing in the securities offered by this prospectus. You should read this summary together with the entire prospectus carefully, including “Risk Factors” and our financial statements and the related notes incorporated by reference into this prospectus, before making an investment decision. See “Risk Factors” for a discussion of the risks involved in investing in our securities.

Corporate 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, six foreign patents (Australia, Brazil, China, Mexico, Japan and Taiwan) and three pending foreign patent applications (Canada, Europe, 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 rights to internally develop and commercialize products; however, we may seek collaborations with partners in the biopharmaceutical industry when a partnering strategy serves to maximize value for our stockholders.

Risk Factor Summary

Investing in our securities involves a high degree of risk. You should carefully consider the risks described in the section entitled “*Risk Factors*” below, as well as other information and risk factors included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, as updated or supplemented on our Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, including our financial statements and the related notes, and the section titled “*Management’s Discussion and Analysis of Financial Condition and Results of Operations,*” any of which may be relevant to decisions regarding an investment in or ownership of our securities. The occurrence of any of these risks could have a significant adverse effect on our reputation, business, financial condition, results of operations, growth and ability to accomplish our strategic objectives.

Risks Related to This Offering

- The public offering price will be set by our board of directors and does not necessarily indicate the actual or market value of our shares of common stock.
- Our management will have broad discretion as to the use of the proceeds from this offering, and may not use the proceeds effectively.
- There is no public market for the pre-funded warrants being offered in this offering.
- Holders of pre-funded warrants purchased in this offering will have no rights as stockholders of shares of common stock until such holders exercise their pre-funded warrants and acquire our shares of common stock, except as set forth in the pre-funded warrants.
- The pre-funded warrants are speculative in nature.
- This is a best efforts offering, no minimum amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans.
- You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.
- Our common stock may be delisted from Nasdaq if we fail to comply with continued listing standards.
- Purchasers who purchase our securities in this offering pursuant to a securities purchase agreement may have rights not available to purchasers that purchase without the benefit of a securities purchase agreement.
- The market price of our shares may be subject to fluctuation and volatility. You could lose all or part of your investment.

Recent Developments

We reconvened our Annual Meeting of Stockholders (the “Annual Meeting”) on January 30, 2026, which was previously convened on December 31, 2025, and then adjourned, without conducting any business, due to insufficient votes to constitute a quorum. Of the 2,018,746 shares of our Common Stock, outstanding as of the record date of December 10, 2025, 1,017,816 shares of common stock were represented at the Annual Meeting, either by proxy or by attending the virtual annual meeting, constituting, of the shares entitled to vote, approximately 50.4% of the outstanding shares of common stock.

On February 2, 2026, Nasdaq’s Hearings Panel granted us an exception to cure our continued listing deficiencies, requiring that we regain compliance with Nasdaq Listing Rule 5550(b)(1) (stockholders’ equity of at least \$2,500,000) by March 30, 2026, and cure our 2025 annual meeting deficiency under Nasdaq Listing Rule 5620(a). The 2025 annual meeting deficiency was cured as described above.

On March 5, 2026, we filed with the Secretary of State of the State of Nevada a Certificate of Change (the “Certificate of Change”), pursuant to Nevada Revised Statutes 78.209, to effect a one-for-three (1-for-3) reverse stock split (the “Reverse Split”) of the Company’s issued and outstanding common stock. The Reverse Split was effective as of 12:01 a.m. Eastern Time on March 10, 2026 (March 9, 2026, at 9:01 p.m. Pacific Time) (the “Effective Time”). As a result of the Reverse Split, each three (3) pre-split shares of common stock outstanding automatically combined into one (1) new share of common stock without any action on the part of the holders, and the number of outstanding shares of common stock was reduced from 2,124,772 to approximately 736,127. The number of authorized shares of common stock was reduced from 500,000,000 to 166,666,667, while the number of authorized shares of preferred stock was reduced from 69,444 to 23,148. The common stock par value of \$0.001 per share remained unchanged after the Reverse Split. The Reverse Split was effected in order to improve the marketability and liquidity of the Company’s common stock.

On March 12, 2026, we entered into a securities purchase agreement with Vanquish Funding Group Inc., pursuant to which we issued a 12% bridge note that matures on January 15, 2027, in the aggregate principal amount of \$237,300, which includes an original issue discount of \$27,300, for an aggregate purchase price of \$210,000. Solely upon the occurrence and continuation of an Event of Default (as defined in the bridge note), the buyer shall have the right, but not the obligation, to convert all or any portion of the outstanding balance of the bridge note, including principal, accrued interest, and any applicable default amount, into shares of our common stock. The conversion price is the greater of (i) \$0.125 and (ii) 75% of the lowest trading price of our common stock during the ten (10) trading days immediately preceding the applicable conversion date.

On March 12, 2026, we entered into a securities purchase agreement with Boot Capital LLC, pursuant to which we issued a 12% bridge note that matures on January 15, 2027, in the aggregate principal amount of \$113,000, which includes an original issue discount of \$13,000, for an aggregate purchase price of \$100,000. Solely upon the occurrence and continuation of an Event of Default (as defined in the bridge note), the buyer shall have the right, but not the obligation, to convert all or any portion of the outstanding balance of the bridge note, including principal, accrued interest, and any applicable default amount, into shares of our common stock. The conversion price is the greater of (i) \$0.125 and (ii) 75% of the lowest trading price of our common stock during the ten (10) trading days immediately preceding the applicable conversion date.

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.

Implications of Being a Smaller Reporting Company

Additionally, we are a “smaller reporting company” as defined in Rule 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (1) the market value of our common stock held by non-affiliates equals or exceeds \$250 million as of the end of that year’s second fiscal quarter, or (2) our annual revenues equaled or exceeded \$100 million during such completed fiscal year and the market value of our common stock held by non-affiliates equals or exceeds \$700 million as of the end of that year’s second fiscal quarter.

The Offering	
Shares offered by us	1,641,587 shares of common stock at a price of \$7.31 per share.
Pre-funded warrants offered by us	We are also offering to those purchasers, if any, whose purchase of shares of common stock in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding shares of common stock immediately following the consummation of this offering, the opportunity to purchase, if such purchasers so choose, pre-funded warrants to purchase shares of common stock in lieu of shares of common stock that would otherwise result in any such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding shares of common stock. The purchase price of each pre-funded warrant will equal the public offering price at which the shares of common stock are being sold to the public in this offering, minus \$0.001, and the exercise price of each pre-funded warrant will be \$0.001 per share. The pre-funded warrants will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. For each pre-funded warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the pre-funded warrants.
Shares of common stock to be outstanding after this offering	2,377,714 shares of common stock (assuming the sale of all shares of common stock covered by this prospectus and no sale of pre-funded warrants, no exercise of the Placement Agent Warrants included in this offering and no exercise of outstanding options issued under our equity incentive plans, and based on 736,127 shares outstanding as of March 18, 2026).
Placement Agent Warrants	We have agreed to issue to the placement agent the Placement Agent Warrants, which are initially exercisable to purchase up to 131,327 shares of common stock, as a portion of the compensation payable to the placement agent in connection with this offering, assuming a public offering price of \$7.31 per share of common stock, which was the last reported sale price of our common stock on Nasdaq on March 18, 2026. The Placement Agent Warrants will be exercisable upon issuance at an exercise price equal to \$7.31 per share of common stock (or 100% of the assumed public offering price per share). See " <i>Description of Securities—Placement Agent Warrants</i> " and " <i>Plan of Distribution</i> ".
Best efforts offering	We have agreed to offer and sell the securities offered hereby directly to the purchasers. We have retained Craft Capital to act as our exclusive placement agent to use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. The placement agent is not required to buy or sell any specific number of the securities offered hereby. See " <i>Plan of Distribution</i> " beginning on page 40 of this prospectus.
Use of proceeds	<p>Assuming we sell all securities offered pursuant to this prospectus, we estimate the net proceeds from this offering will be approximately \$10.8 million, based on an assumed public offering price of \$7.31 per share (the last reported sale price of our shares of common stock on Nasdaq on March 18, 2026), after deducting placement agent fees and estimated offering expenses payable by us. However, this is a best efforts offering with no minimum number of securities or amount of proceeds as a condition to closing, and we may not sell all or any of these shares or pre-funded warrants offered pursuant to this prospectus; as a result, we may receive significantly less in net proceeds.</p> <p>We intend to use the net proceeds of this offering for working capital and general corporate purposes. See "<i>Use of Proceeds</i>" on page 13 of this prospectus for more information.</p>
Dividend policy	We have never declared or paid any cash dividends on our shares of common stock. We do not anticipate paying any cash dividends in the foreseeable future.
Risk factors	You should carefully consider the risk factors described in the section of this prospectus entitled " <i>Risk Factors</i> ," together with all of the other information included in this prospectus, before deciding to purchase our securities.
Market and trading symbol	Our shares of common stock are traded on Nasdaq under the symbol "ARTL." We do not intend to list the pre-funded warrants on Nasdaq or any other national securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

Assumptions Used Throughout This Prospectus

Unless otherwise stated in this prospectus, the total number of shares of common stock outstanding as of the date of this prospectus and after this offering is based on 736,127 shares of common stock outstanding as of March 18, 2026 (giving effect to the one-for-three reverse stock split of our common stock effected on March 10, 2026), and excludes the following:

- 75,998 shares of our common stock issuable upon the exercise of options or restricted stock awards granted under our 2018 Equity Incentive Plan (the “2018 Plan”), with a weighted-average exercise price of \$33.09 per share;
- 466,263 shares of our common stock issuable upon the exercise of warrants, with a weighted-average exercise price of \$16.89 per share issued prior to January 2026;
- 41,089 shares of common stock issuable upon the voluntary conversion of convertible notes issued in our October 2025 private placement;
- 35,857 shares of our common stock reserved for future issuance under our 2018 Plan;
- 62,124 shares of our common stock issuable upon the exercise of pre-funded warrants issued pursuant to our Equity Purchase Agreement, dated as of January 30, 2026 (the “ELOC Purchase Agreement”), at an exercise price of \$0.003 per share; and
- up to \$25 million in shares of common stock that may be issued and sold by us pursuant to the ELOC Purchase Agreement, which at the Company’s sole discretion can be increased by an additional \$25 million once the initial \$25 million is exhausted.

Except as otherwise noted, all information in this prospectus reflects and assumes (i) no sale or issuance of pre-funded warrants in this offering, which, if sold, would reduce the number of shares of common stock that we are offering on a one-for-one basis, (ii) no exercise of outstanding options issued under our equity incentive plans, and (iii) no exercise of any of our outstanding warrants or the Placement Agent Warrants.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference contains forward-looking statements that are based on our management's beliefs and assumptions and on information currently available. This section should be read in conjunction with our financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2025. The statements contained or incorporated by reference in this prospectus that are not historical facts are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended.

Forward-looking statements can be identified by words such as "believe," "anticipate," "may," "might," "can," "could," "continue," "depends," "expect," "expand," "forecast," "intend," "predict," "plan," "rely," "should," "will," "may," "seek," or the negative of these terms and other similar expressions, although not all forward-looking statements contain these words. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other "forward-looking" information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements.

These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including, but not limited to, those described in "*Risk Factors*." These forward-looking statements reflect our beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this prospectus and are subject to risks and uncertainties. We discuss many of these risks in greater detail in the section entitled "*Risk Factors*" and elsewhere in this prospectus, including the information incorporated by reference. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We qualify all of the forward-looking statements in this prospectus by these cautionary statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in any forward-looking statements, whether as a result of new information, future events or otherwise.

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, and although 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 a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

This prospectus and the information incorporated by reference also contains estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from reports, research surveys, studies, and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data, and similar sources.

RISK FACTORS

An investment in our securities involves a high degree of risk. Our business, financial condition or results of operations could be materially and adversely affected by any of these risks. If any of these risks occur, the value of our shares of common stock and our other securities may decline. Before making your investment decision, you should carefully consider the risks together with all of the other information contained or incorporated by reference in this prospectus, including any risks in the section entitled “*Risk Factors*” contained in any supplements to this prospectus, in our Annual Report on Form 10-K filed with the SEC on February 24, 2026, as updated or supplemented on our Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, and in our subsequent filings with the SEC. Each of the referenced risks and uncertainties could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Additional risks not known to us or that we believe are immaterial may also adversely affect our business, operating results and financial condition and the value of an investment in our securities. These disclosures reflect our beliefs and opinions as to factors that could materially and adversely affect us and our securities in the future. References to past events are provided by way of example only and are not intended to be a complete listing or a representation as to whether or not such factors have occurred in the past or their likelihood of occurring in the future.

Risks Related to This Offering

The public offering price will be set by our board of directors and does not necessarily indicate the actual or market value of our shares of common stock.

Our board of directors, or a committee designated by the board of directors, will approve the public offering price and other terms of this offering after considering, among other things: the current market price of our shares of common stock; trading prices of our common stock over time; the volatility of our shares of common stock; our current financial condition and the prospects for our future cash flows; the availability of and likely cost of capital of other potential sources of capital; the characteristics of interested investors and market and economic conditions at the time of the offering. The public offering price is not intended to bear any relationship to the book value of our assets or our past operations, cash flows, losses, financial condition, net worth or any other established criteria used to value securities. The public offering price may not be indicative of the fair value of the common stock.

Our management will have broad discretion as to the use of the proceeds from this offering, and may not use the proceeds effectively.

Our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of the offering. Currently, we intend to use the net proceeds from this offering primarily for working capital and general corporate purposes. See “*Use of Proceeds*.” You will not have the opportunity, as part of your investment decision, to assess whether these proceeds are being used appropriately. Our management may use the net proceeds for corporate purposes that may not improve our financial condition or market value, which could cause the price of our shares of common stock to decline.

There is no public market for the pre-funded warrants being offered in this offering.

There is no established public trading market for the pre-funded warrants being offered in this offering, and we do not expect such a market to develop. In addition, we do not intend to apply to list the pre-funded warrants on any securities exchange or nationally recognized trading system, including Nasdaq. Without an active market, the liquidity of the pre-funded warrants will be limited.

Holders of pre-funded warrants purchased in this offering will have no rights as stockholders of shares of common stock until such holders exercise their pre-funded warrants and acquire our shares of common stock, except as set forth in the pre-funded warrants.

Except as set forth in the pre-funded warrants, until holders of pre-funded warrants acquire our shares of common stock upon exercise of the pre-funded warrants, holders of pre-funded warrants have no rights with respect to our shares of common stock underlying such pre-funded warrants. Upon exercise of the pre-funded warrants, the holders will be entitled to exercise the rights of a stockholder of shares of common stock only as to matters for which the record date occurs after the exercise date.

The pre-funded warrants are speculative in nature.

The pre-funded warrants offered hereby do not confer any rights of share of common stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price. Specifically, commencing on the date of issuance, holders of the pre-funded warrants may acquire the shares of common stock issuable upon exercise of such warrants at an exercise price of \$0.001 per share of common stock. Moreover, following this offering, the market value of the pre-funded warrants is uncertain and there can be no assurance that the market value of the pre-funded warrants will equal or exceed their respective public offering prices. There can be no assurance that the market price of the shares of common stock will ever equal or exceed the exercise price of the pre-funded warrants, and consequently, whether it will ever be profitable for holders of the pre-funded warrants to exercise the pre-funded warrants.

This is a best efforts offering, no minimum amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans.

The placement agent has agreed to use its reasonable best efforts to solicit offers to purchase the shares of common stock and pre-funded warrants in this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. There is no required minimum number of securities or amount of proceeds that must be sold as a condition to completion of this offering. Because there is no minimum number of securities or amount of proceeds required as a condition to the closing of this offering, the actual offering amount, placement agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth above. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to fund our business plans.

You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of shares of common stock in this offering at an assumed public offering price of \$7.31 per share, and after deducting placement agent fees and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of \$4.07 per share. Additionally, to the extent that any pre-funded warrants or Placement Agent Warrants issued in this offering, any outstanding warrants, or outstanding or to be granted options to officers, directors and employees, are ultimately exercised, you will sustain future dilution. See the section entitled “*Dilution*” for additional information on how this offering may affect current and prospective shareholders.

We will likely need to offer and issue additional shares of our common stock or other equity or convertible debt securities in order to raise additional capital. Future equity offerings or other equity issuances may be at a price per share that is equal to or greater than the price per share paid by investors in this offering. Future investors in such offerings may have rights superior to existing stockholders, and the price per share at which we sell additional shares of common stock or other equity or convertible debt securities in future transactions may be at a higher or lower price per share than the price per share in this offering.

Our common stock may be delisted from Nasdaq if we fail to comply with continued listing standards.

Our common stock is currently traded on Nasdaq under the symbol “ARTL.” If we fail to comply with Nasdaq’s continued listing standards, we may be delisted and our common stock will trade, if at all, only on the over-the-counter market, such as the OTC Bulletin Board or OTCQX market, and then only if one or more registered broker-dealer market makers comply with quotation requirements. In addition, delisting of our common stock could depress our stock price, substantially limit liquidity of our common stock and materially adversely affect our ability to raise capital on terms acceptable to us, or at all. Further, delisting of our common stock would likely result in our common stock becoming a “penny stock” under the Exchange Act.

On May 22, 2025, we received a notice from the Nasdaq staff notifying us that, because our stockholders’ equity was below \$2.5 million as reported on our Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, we no longer meet the minimum stockholders’ equity requirement for continued listing on Nasdaq under Nasdaq Rule 5550(b)(1). Pursuant to the notice and the Listing Rules of Nasdaq, we submitted a plan to regain compliance with the minimum stockholders’ equity requirement within 45 calendar days of receiving the letter from the Staff. This plan was updated and resubmitted to Nasdaq on August 29, 2025. The Nasdaq staff determined that the Company has not completed the capital raising that was discussed in the materials submitted to Nasdaq on July 7, 2025, and August 29, 2025, which the Company expected would enable it to demonstrate compliance with the Rule. As a result, on November 19, 2025, the Company received a delist determination letter from Nasdaq advising the Company that the Nasdaq staff had determined that the Company had not satisfied the conditions set forth in the May 22 letter to regain compliance. The Company appealed Nasdaq’s determination to a hearing panel on January 15, 2026, to stay any further delisting actions. On February 2, 2026, the hearing panel issued an extension to March 30, 2026, for the Company to resolve the minimum shareholders’ equity deficiency. The Company held its annual meeting on January 30, 2026, and cured the annual meeting deficiency. Following the hearing panel’s extension, the Company’s Common Stock will continue to trade on Nasdaq under the symbol “ARTL.”

Although we intend to use all reasonable efforts to achieve compliance with all Nasdaq listing standards, there can be no assurance that we will be able to regain 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 are able to regain 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. That Rule 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.

Purchasers who purchase our securities in this offering pursuant to a securities purchase agreement may have rights not available to purchasers that purchase without the benefit of a securities purchase agreement.

In addition to rights and remedies available to all purchasers in this offering under federal securities and state law, the purchasers that enter into a securities purchase agreement will also be able to bring claims of breach of contract against us. The ability to pursue a claim for breach of contract provides those investors with the means to enforce the covenants uniquely available to them under the securities purchase agreement including, but not limited to (i) timely delivery of securities, (ii) agreement to not issue any shares or securities convertible into shares for a period of days from closing of the offering, subject to certain exceptions and (iii) indemnification for breach of contract.

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 Nasdaq 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

Assuming we sell all shares of common stock offered pursuant to this prospectus, we estimate the net proceeds from this offering will be approximately \$10.8 million, based on an assumed public offering price of \$7.31 per share (the last reported sale price of our shares of common stock on Nasdaq on March 18, 2026), after deducting placement agent fees and estimated offering expenses payable by us as described in “*Plan of Distribution*” and excluding the proceeds, if any, from the exercise of the pre-funded warrants sold in this offering and the Placement Agent Warrants. However, this is a best efforts offering with no minimum number of securities or amount of proceeds as a condition to closing, and we may not sell all or any of these shares or pre-funded warrants offered pursuant to this prospectus; as a result, we may receive significantly less in net proceeds.

We intend to use the net proceeds of this offering for working capital and general corporate purposes.

The amounts and timing of our actual use of the net proceeds from this offering will vary depending on numerous factors, including the factors described under “*Risk Factors*” located elsewhere in this prospectus or in the information incorporated by reference herein or therein. As a result, our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds from this offering.

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. See the section captioned “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*” contained in our Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q for additional information regarding our financial condition.

CAPITALIZATION

The following table sets forth our cash and cash equivalents, short-term investments and capitalization as of December 31, 2025:

- On an actual basis; and
- On an as adjusted basis to give effect to this offering at an assumed public offering price of \$7.31 per share, which is the last reported sale price of our shares of common stock on Nasdaq on March 18, 2026, assuming no sale of any pre-funded warrants in this offering and after deducting the estimated placement agent fees and estimated offering expenses payable by us as described under “*Use of Proceeds*.”

The as adjusted information below is illustrative only. You should read this table together with the information contained in this prospectus and the information incorporated by reference from our Annual Report on Form 10-K for the year ended December 31, 2025, including the historical financial statements and related notes included therein.

	As of December 31, 2025	
	Actual	As Adjusted (Unaudited)
	(U.S. \$ in thousands)	
Cash and cash equivalents	\$ 600	\$ 11,400
Total current liabilities	\$ 4,044	\$ 4,044
Stockholders' equity		
Preferred Stock, par value \$0.001, 23,148 shares authorized, 0 shares issued and outstanding as of December 31, 2025	-	-
Common Stock, par value \$0.001, 166,666,667 shares authorized and 673,008 shares issued and outstanding as of December 31, 2025	1	3
Additional paid in capital	62,014	72,814
Accumulated deficit	(63,015)	(63,015)
Accumulated other comprehensive loss	(272)	(272)
Total stockholders' (deficit) equity	<u>\$ (1,272)</u>	<u>\$ 9,530</u>

A \$1.00 increase or decrease in the assumed public offering price of \$7.31 per share, which is the last reported sale price of our shares of common stock on Nasdaq on March 18, 2026, would increase or decrease, as appropriate, our pro forma as-adjusted cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by approximately \$1.5 million, assuming the number of shares offered by us as set forth on the cover page of this prospectus remains the same, and after deducting the estimated placement agent fees and estimated offering expenses payable by us.

Similarly, an increase or decrease of 100,000 in the number of shares offered by us, based on the assumed public offering price of \$7.31 per share, would increase or decrease our pro forma as-adjusted cash and cash equivalents, total assets and total shareholders' equity by approximately \$0.7 million, after deducting the placement agent fees and estimated offering expenses payable by us. The information discussed above is illustrative only and will adjust based on the actual offering price, the actual number of units we offer in this offering, and other terms of this offering determined at pricing.

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The table and discussion above are based on 673,008 shares of common stock outstanding as of December 31, 2025 (giving effect to the one-for-three reverse stock split of our common stock effected on March 10, 2026), and excludes the following:

- 75,998 shares of our common stock issuable upon the exercise of options or restricted stock awards granted under the 2018 Plan, with a weighted-average exercise price of \$33.09 per share;
- 466,263 shares of our common stock issuable upon the exercise of warrants, with a weighted-average exercise price of \$16.89 per share issued prior to January 2026;
- 41,089 shares of common stock issuable upon the voluntary conversion of convertible notes issued in our October 2025 private placement;
- 35,857 shares of our common stock reserved for future issuance under our 2018 Plan;
- 62,124 shares of our common stock issuable upon the exercise of pre-funded warrants issued pursuant to our ELOC Purchase Agreement, at an exercise price of \$0.003 per share; and
- up to \$25 million in shares of common stock that may be issued and sold by us pursuant to the ELOC Purchase Agreement, which at the Company's sole discretion can be increased by an additional \$25 million once the initial \$25 million is exhausted.

DILUTION

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

As of December 31, 2025, our net tangible book value was \$(3.3) million, or \$(4.92) per share of our common stock, based upon 673,008 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 per share to new investors purchasing common stock in this offering is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by new investors.

After giving effect to our issuance and sale of securities in this offering at an assumed public offering price of \$7.31 per share (the closing sale price of our common stock on Nasdaq on March 18, 2026), assuming no pre-funded warrants are sold in this offering and after deducting placement agent fees and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2025 would have been approximately \$9.5 million, or approximately \$4.12 per share. This represents an immediate increase in actual net tangible book value per share of \$8.16 to our existing stockholders and an immediate dilution in actual net tangible book value per share of approximately \$4.07 to new investors purchasing units in this offering, as illustrated by the following table:

Public offering price per share	\$	7.31
Net tangible book value per share as of December 31, 2025	\$	(4.92)
Increase in net tangible book value per share attributable to this offering	\$	8.16
As adjusted net tangible book value per share after giving effect to this offering	\$	3.24
Dilution per share to new investors participating in this offering	\$	<u>(4.07)</u>

If we only sell 75% or 50% of the maximum offering amount, our as adjusted net tangible book value after this offering would be approximately \$4.8 million or \$2.1 million, respectively, and the dilution per share to investors purchasing securities in this offering would be \$5.24 or \$6.41, respectively, assuming no pre-funded warrants are sold and after deducting placement agent fees and estimated offering expenses payable by us.

The information discussed above is illustrative only and will be adjusted based on the actual public offering price, the actual number of securities that we offer in this offering, and other terms of this offering determined at the time of pricing. The foregoing discussion and table assumes no sale of pre-funded warrants, which if sold, would reduce the number of shares that we are offering on a one-for-one basis. In addition, we may choose to raise additional capital due to market conditions or strategic considerations. 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.

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The table and discussion above are based on 673,008 shares of common stock outstanding as of December 31, 2025 (giving effect to the one-for-three reverse stock split of our common stock effected on March 10, 2026), and excludes the following:

- 75,998 shares of our common stock issuable upon the exercise of options or restricted stock awards granted under the 2018 Plan, with a weighted-average exercise price of \$33.09 per share;
- 466,263 shares of our common stock issuable upon the exercise of warrants, with a weighted-average exercise price of \$16.89 per share issued prior to January 2026;
- 41,089 shares of common stock issuable upon the voluntary conversion of convertible notes issued in our October 2025 private placement;
- 35,857 shares of our common stock reserved for future issuance under our 2018 Plan;
- 62,124 shares of our common stock issuable upon the exercise of pre-funded warrants issued pursuant to our ELOC Purchase Agreement, at an exercise price of \$0.003 per share; and
- up to \$25 million in shares of common stock that may be issued and sold by us pursuant to the ELOC Purchase Agreement, which at the Company's sole discretion can be increased by an additional \$25 million once the initial \$25 million is exhausted.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of March 18, 2026, for (i) each of our executive officers and directors; (ii) all of our executive officers and directors as a group; and (iii) each other shareholder known by us to be the beneficial owner of more than 5% of any class of our voting securities.

The percentage beneficial ownership information prior to the offering shown in the table is based on an aggregate of 736,127 shares of our common stock outstanding as of March 18, 2026. The percentage of beneficial ownership after this offering shown in the table is based on shares of common stock outstanding after the closing of this offering, assuming no sale of pre-funded warrants, no exercise of outstanding options issued under our equity incentive plans and no exercise of any outstanding warrants.

Beneficial ownership is determined according to the rules of the SEC, which generally provide that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power over that security. Under those rules, beneficial ownership includes securities that the individual or entity has the right to acquire, such as through the exercise of stock options, within 60 days of March 18, 2026. Shares subject to options that are currently exercisable or exercisable within 60 days of March 18, 2026 are considered outstanding and beneficially owned by the person holding such options for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, and subject to community property laws where applicable, based on the information provided to us, we believe that the persons and entities named in the table below have sole voting and investment power with respect to all shares shown as beneficially owned by them.

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Except as otherwise noted below, the address of each of the individuals and entities named in the table below is c/o Artelo Biosciences, Inc., 505 Lomas Santa Fe, Suite 160, Solana Beach, California 92075.

Name and Address of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned Prior to this Offering		Number of Shares of Common Stock Beneficially Owned After this Offering	
	Shares	Percentage (%)	Shares	Percentage (%)
5% Stockholders:				
None				%
Directors and Named Executive Officers:				
Gregory D. Gorgas ⁽¹⁾	32,138	4.2%	32,138	1.3%
Connie Matsui ⁽²⁾	48,702	6.2%	48,702	2.0%
Steven Kelly ⁽³⁾	669	*	669	*
Douglas Blayney, M.D. ⁽⁴⁾	695	*	695	*
R. Martin Emanuele, Ph.D. ⁽⁵⁾	688	*	688	*
Gregory R. Reyes M.D., Ph.D. ⁽⁶⁾	546	*	546	*
Tamara A. Favorito ⁽⁷⁾	8,836	1.2%	8,836	*
Mark E. Spring ⁽⁸⁾	556	*	556	*
All directors and executive officers as a group (8 persons)	92,830	11.2%	92,830	3.8%

* Less than 1%

- (1) Consists of (i) 1,003 shares held directly by Gregory D. Gorgas, (ii) 134 shares held indirectly by Gorgas Family Trust, (iii) 19,059 shares of common stock issuable pursuant to options held directly by Gregory D. Gorgas exercisable within 60 days, (iv) 2,882 shares issued on the conversion of an outstanding note payable, (v) 3,196 warrants representing 3,196 shares of common stock which have an exercise price of \$18.72 per common share and expire in October 2030, and (vi) 5,864 warrants representing 5,864 shares of common stock which have an exercise price of \$10.20 per common share and expire in October 2030.
- (2) Consists of (i) 210 shares held directly by Connie Matsui, (ii) 725 shares of common stock issuable pursuant to options held directly by Connie Matsui exercisable within 60 days, (iii) 11,526 shares issued on the conversion of an outstanding note payable, (v) 12,782 warrants representing 12,782 shares of common stock which have an exercise price of \$18.72 per common share and expire in October 2030, and (vi) 23,459 warrants representing 23,459 shares of common stock which have an exercise price of \$10.20 per common share and expire in October 2030.
- (3) Consists of (i) 47 shares held by Steven Kelly, and (ii) 622 shares of common stock issuable pursuant to options held directly by Steven Kelly exercisable within 60 days.
- (4) Consists of (i) 47 shares held by Douglas Blayney, M.D., and (ii) 648 shares of common stock issuable pursuant to options held directly by Douglas Blayney, M.D. exercisable within 60 days.
- (5) Consists of (i) 47 shares held by R. Marty Emanuele, Ph.D., and (ii) 641 shares of common stock issuable pursuant to options held directly by R. Marty Emanuele, Ph.D. exercisable within 60 days.
- (6) Consists of 546 shares of common stock issuable pursuant to options held directly by Gregory R. Reyes M.D., Ph.D. exercisable within 60 days.
- (7) Consists of (i) 307 shares of common stock issuable pursuant to options held directly by Tamara A. Favorito exercisable within 60 days, (ii) 2,058 shares issued on the conversion of an outstanding note payable, (iii) 2,282 warrants representing 2,282 shares of common stock which have an exercise price of \$18.72 per common share and expire in October 2030, and (vi) 4,189 warrants representing 4,189 shares of common stock which have an exercise price of \$10.20 per common share and expire in October 2030.
- (8) Consists of 556 shares of common stock issuable pursuant to options held directly by Mark E. Spring, exercisable within 60 days.

DESCRIPTION OF SECURITIES WE ARE OFFERING

The following description summarizes certain terms of our capital stock, certain provisions of our articles of incorporation and bylaws and certain terms of the pre-funded warrants included in this offering. This summary does not purport to be complete and is qualified in its entirety by the provisions of our articles of incorporation and bylaws and the provisions of the pre-funded warrants, copies of which are filed with the SEC as exhibits to the Registration Statement on Form S-1 of which this prospectus forms a part, and to the applicable provisions of Nevada law.

We are offering shares of common stock and pre-funded warrants to purchase up to an aggregate of 1,641,587 shares of common stock. For each pre-funded warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. We are also registering the shares of common stock issuable from time to time upon exercise of the pre-funded warrants.

Our authorized capital stock consists of 166,689,815 shares of capital stock, of which 166,666,667 shares are designated as common stock, \$0.001 par value per share, and 23,148 shares are designated as preferred stock, \$0.001 par value per share. As of March 18, 2026, there were 736,127 shares of common stock issued and outstanding, and no outstanding shares of preferred stock.

Common Stock

The holders of our common stock (i) have equal ratable rights to dividends from funds legally available, therefore, when, as and if declared by our board of directors; (ii) are entitled to share in all of our assets available for distribution to holders of common stock upon liquidation, dissolution or winding up of our affairs; (iii) do not have preemptive, subscription or conversion rights and there are no redemption or sinking fund provisions or rights; and (iv) are entitled to one non-cumulative vote per share on all matters submitted to a vote of stockholders. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

The Company has authorized 23,148 shares of preferred stock. There is no preferred stock outstanding.

Anti-Takeover Effects of Nevada Law and our Articles of Incorporation and Bylaws.

Certain provisions of Nevada law and certain provisions that are included in our Articles of Incorporation and our Bylaws may have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our Board. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Classified Board. Our amended and restated certificate of incorporation provides that our board of directors is divided into three classes, designated Class I, Class II, and Class III. Each class will be an equal number of directors, as nearly as possible, consisting of one third of the total number of directors constituting the entire board of directors. The term of Class I directors shall terminate on the date of the 2027 annual meeting, the term of the Class II directors shall terminate on the date of the 2028 annual meeting, and the term of the Class III directors shall terminate on the date of the 2026 annual meeting. At each annual meeting of stockholders, successors to the class of directors whose term expires at that annual meeting will be elected for a three-year term.

Stockholder Meetings. Our Bylaws provide that a special meeting of stockholders may be called only by our president, by all of the directors provided that there are no more than three directors, or if more than three, by any three directors, or by the holder of a majority share of our capital stock.

Stockholder Action by Written Consent. Our Bylaws allow for any action that may be taken at any annual or special meeting of the stockholders to be taken without a meeting and without prior notice, if a consent in writing, setting forth the action so taken, is signed by the holders of outstanding shares having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

Stockholders Not Entitled to Cumulative Voting. Our Bylaws do not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our Common Stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Nevada Business Combination Statutes. The “business combination” provisions of Sections 78.411 to 78.444, inclusive, of the Nevada Revised Statutes, (the “NRS”), generally prohibit a Nevada corporation with at least 200 stockholders of record from engaging in various “combination” transactions with any interested stockholder for a period of two years after the date of the transaction in which the person became an interested stockholder, unless the transaction is approved by the Board prior to the date the interested stockholder obtained such status or the combination is approved by the Board and thereafter is approved at a meeting of the stockholders by the affirmative vote of stockholders representing at least 60% of the outstanding voting power held by disinterested stockholders, and extends beyond the expiration of the two-year period, unless:

- the combination was approved by the Board prior to the person becoming an interested stockholder or the transaction by which the person first became an interested stockholder was approved by the Board before the person became an interested stockholder or the combination is later approved by a majority of the voting power held by disinterested stockholders; or
- if the consideration to be paid by the interested stockholder is at least equal to the highest of: (a) the highest price per share paid by the interested stockholder within the two years immediately preceding the date of the announcement of the combination or in the transaction in which it became an interested stockholder, whichever is higher, (b) the market value per share of common stock on the date of announcement of the combination and the date the interested stockholder acquired the shares, whichever is higher, or (c) for holders of preferred stock, the highest liquidation value of the preferred stock, if it is higher.

A “combination” is generally defined to include mergers or consolidations or any sale, lease exchange, mortgage, pledge, transfer, or other disposition, in one transaction or a series of transactions, with an “interested stockholder” having: (a) an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation, (b) an aggregate market value equal to 5% or more of the aggregate market value of all outstanding voting shares of the corporation, (c) more than 10% of the earning power or net income of the corporation, and (d) certain other transactions with an interested stockholder or an affiliate or associate of an interested stockholder.

In general, an “interested stockholder” is a person who, together with affiliates and associates, beneficially owns (or within two years, did own) 10% or more of the voting power of the outstanding voting shares of a corporation. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Nevada Control Share Acquisition Statutes. The “control share” provisions of Sections 78.378 to 78.3793, inclusive, of the NRS apply to “issuing corporations” that are Nevada corporations with at least 200 stockholders of record, including at least 100 stockholders of record who are Nevada residents, and that conduct business in Nevada directly or through an affiliated corporation. The control share statute prohibits an acquirer, under certain circumstances, from voting its shares of a target corporation’s stock after crossing certain ownership threshold percentages, unless the acquirer obtains approval of the target corporation’s disinterested stockholders. The statute specifies three thresholds: one-fifth or more but less than one-third, one-third or more but less than a majority, and a majority or more, of the outstanding voting power. Generally, once an acquirer crosses one of the above thresholds, those shares in an offer or acquisition and acquired within 90 days thereof become “control shares” and such control shares are deprived of the right to vote until disinterested stockholders restore the right. These provisions also provide that if control shares are accorded full voting rights and the acquiring person has acquired a majority or more of all voting power, all other stockholders who do not vote in favor of authorizing voting rights to the control shares are entitled to demand payment for the fair value of their shares in accordance with statutory procedures established for dissenters’ rights.

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A corporation may elect to not be governed by, or “opt out” of, the control share provisions by making an election in its articles of incorporation or bylaws, provided that the opt-out election must be in place on the 10th day following the date an acquiring person has acquired a controlling interest, that is, crossing any of the three thresholds described above. We have not opted out of the control share statutes and will be subject to these statutes if we are an “issuing corporation” as defined in such statutes.

The effect of the Nevada control share statutes is that the acquiring person, and those acting in association with the acquiring person, will obtain only such voting rights in the control shares as are conferred by a resolution of the stockholders at an annual or special meeting. The Nevada control share law, if applicable, could have the effect of discouraging takeovers of us.

Amendment of Charter and Bylaw Provisions. The amendment of any of the above provisions would require approval by holders of at least a 35% of the total voting power of all of our outstanding voting stock, except in certain circumstances.

The provisions of Nevada law, our Articles of Incorporation, and our Bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, LLC. The transfer agent’s address is 48 Wall Street, 23rd floor, New York, NY 10043.

Market Listing

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

Pre-Funded Warrants

The following description of the pre-funded warrants we are offering is a summary and is qualified in its entirety by reference to the provisions of the pre-funded warrant, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part.

Duration and Exercise Price. Each pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.001. The pre-funded warrants will be immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our shares of common stock and the exercise price.

Exercisability. The pre-funded warrants will be exercisable, at the option of the holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). Purchasers of the pre-funded warrants in this offering may elect to deliver their exercise notice following the pricing of the offering and prior to the issuance of the pre-funded warrants at closing to have their pre-funded warrants exercised immediately upon issuance and receive shares of common stock underlying the pre-funded warrants upon closing of this offering. A holder (together with its affiliates) may not exercise any portion of the pre-funded warrant to the extent that the holder would own more than 4.99% (or, at the election of the holder, 9.99%) of the outstanding shares of common stock immediately after exercise. However, upon notice from the holder to us, the holder may decrease or increase the beneficial ownership limitation, which may not exceed 9.99% of the number of shares of common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants, provided that any increase in the beneficial ownership limitation will not take effect until 61 days following notice to us. No fractional shares of common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will either pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Cashless Exercise. At any time, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of the shares of common stock determined according to a formula set forth in the pre-funded warrants.

Transferability. Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer.

Exchange Listing. There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system. We do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system.

Right as a Shareholder. Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of our shares of common stock, the holders of the pre-funded warrants do not have the rights or privileges of holders of our shares of common stock, including any voting rights, until they exercise their pre-funded warrants.

Fundamental Transaction. In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our shares of common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding shares of common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding shares of common stock, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction.

Placement Agent Warrants

The following description of the Placement Agent Warrants we are offering is a summary and is qualified in its entirety by reference to the provisions of the Placement Agent Warrants, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part.

General. We have agreed to issue to the placement agent the Placement Agent Warrants initially exercisable to purchase up to 131,327 shares of common stock as a portion of the compensation payable to the placement agent in connection with this offering, assuming a public offering price of \$7.31 per share of common stock, which was the last reported sale price of our common stock on Nasdaq on March 18, 2026.

Duration and Exercise Price. Each Placement Agent Warrant offered hereby will have an initial exercise price per share equal to \$7.31, which equals 100% of the public offering price per share, assuming a public offering price of \$7.31 per share of common stock, which was the last reported sale price of our common stock on Nasdaq on March 18, 2026. The Placement Agent Warrants will be immediately exercisable and will expire five (5) years following the date of issuance. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our shares of common stock and the exercise price.

Exercisability. The Placement Agent Warrants will be exercisable, at the option of the holder, in whole or in part, from the date of issuance until the earlier of full exercise or the expiration date, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). No fractional shares of common stock will be issued in connection with the exercise of the Placement Agent Warrants. In lieu of fractional shares, we will round to the nearest whole share.

Cashless Exercise. At any time, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of the shares of common stock determined according to a formula set forth in the Placement Agent Warrants.

Transferability. Subject to applicable laws, the Placement Agent Warrant may be transferred at the option of the holder upon surrender of the Placement Agent Warrants to us together with the appropriate instruments of transfer.

Exchange Listing. There is no trading market available for the Placement Agent Warrants on any securities exchange or nationally recognized trading system. We do not intend to list the Placement Agent Warrants on any securities exchange or nationally recognized trading system.

Right as a Shareholder. Except as otherwise provided in the Placement Agent Warrants or by virtue of such holder's ownership of our shares of common stock, the holders of the Placement Agent Warrants do not have the rights or privileges of holders of our shares of common stock, including any voting rights, until they exercise their Placement Agent Warrants.

Fundamental Transaction. In the event of a fundamental transaction, as described in the Placement Agent Warrants and generally including any reorganization, recapitalization or reclassification of our shares of common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding shares of common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding shares of common stock, the holders of the Placement Agent Warrants will be entitled to receive upon exercise of the Placement Agent Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Placement Agent Warrants immediately prior to such fundamental transaction.

PLAN OF DISTRIBUTION

We have engaged Craft Capital Management LLC to act as our exclusive placement agent to solicit offers to purchase the securities offered pursuant to this prospectus on a "reasonable best efforts" basis. The engagement agreement does not give rise to any commitment by the placement agent to purchase any of our securities, and the placement agent will have no authority to bind us by virtue of the engagement agreement. The placement agent is not purchasing or selling any of the securities offered by us under this prospectus, nor is it required to arrange for the purchase or sale of any specific number or dollar amount of securities. This is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this offering. The placement agent has agreed to use reasonable best efforts to arrange for the sale of the securities by us. Therefore, we may not sell all of the shares of common stock and pre-funded warrants being offered. The terms of this offering are subject to market conditions and negotiations between us, the placement agent and prospective investors. The placement agent does not guarantee that it will be able to raise new capital in any prospective offering. The placement agent may engage sub-agents or selected dealers to assist with the offering.

Investors purchasing securities offered hereby will have the option to execute a securities purchase agreement with us. In addition to rights and remedies available to all purchasers in this offering under federal securities and state law, the purchasers which enter into a securities purchase agreement will also be able to bring claims of breach of contract against us. The ability to pursue a claim for breach of contract is material to larger purchasers in this offering as a means to enforce the following covenants uniquely available to them under the securities purchase agreement: (i) a covenant to not enter into variable rate financings for a period of one year following the closing of the offering, subject to certain exceptions; and (ii) a covenant to not enter into any equity financings for 30 days from closing of the offering, subject to certain exceptions. The nature of the representations, warranties and covenants in the securities purchase agreements shall include:

- standard issuer representations and warranties on matters such as organization, qualification, authorization, no conflict, no governmental filings required, current in SEC filings, no litigation, labor or other compliance issues, environmental, intellectual property and title matters and compliance with various laws such as the Foreign Corrupt Practices Act; and
- covenants regarding matters such as registration of pre-funded warrant shares, no integration with other offerings, no stockholder rights plans, no material nonpublic information, use of proceeds, indemnification of purchasers, reservation and listing of shares of common stock, and no subsequent equity sales for 30 days, subject to certain exceptions.

This offering will terminate on March 31, 2026, unless we decide to terminate the offering (which we may do at any time in our discretion) prior to that date. We will have one closing for all the securities purchased in this offering. The public offering price per share (or pre-funded warrant) will be fixed for the duration of this offering.

Delivery of the securities offered hereby is expected to occur on or about March [], 2026, subject to satisfaction or waiver of customary closing conditions.

Placement Agent Fees and Expenses

We have agreed to pay the placement agent a cash fee equal to 8.0% of the gross proceeds received from the sale of securities in the offering. We have also agreed to reimburse the placement agent in connection with this offering for its reasonable accountable expenses incurred in connection with this offering, including legal expenses in an amount up to \$100,000. We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agent's fees and expenses, will be approximately \$140,000. After deducting the placement agent's fees and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$10.8 million.

The following table shows the public offering price, placement agent fees and proceeds, before expenses, to us, assuming the purchase of all the securities we are offering.

	Per Share	Per Pre-Funded Warrant	Total ⁽²⁾
Public offering price	\$	\$	\$
Placement agent cash fee (8.0%)	\$	\$	\$
Proceeds, before expenses, to us ⁽¹⁾	\$	\$	\$

- (1) The amount of offering proceeds, before expenses, to us does not give effect to any exercise of the pre-funded warrants being offered in this offering.
- (2) Because there is no minimum number of securities or amount of proceeds required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above.

Placement Agent Warrants

We have agreed to issue to the Placement Agent Warrants to purchase a number of shares of our common stock equal to 8.0% of the aggregate number of shares of common stock (including shares of common stock underlying the pre-funded warrants) sold to the investors in this offering. The Placement Agent Warrants will have an exercise price equal to 100% of the public offering price per share of common stock in this offering. The Placement Agent Warrants are exercisable immediately after issuance and will expire five (5) years following the date of issuance. The Placement Agent Warrants will be issued pursuant to this registration statement and are registered hereunder. The form of the Placement Agent Warrant is included as an exhibit to the registration statement of which this prospectus forms a part. The Placement Agent Warrants and the shares of our common stock issuable upon exercise of the Placement Agent Warrants have been included in the registration statement of which this prospectus forms a part.

Indemnification

We have agreed to indemnify the placement agent and specified other persons against certain liabilities, including certain liabilities arising under the Securities Act, or to contribute to payments that the placement agent or such other persons may be required to make in respect of such liabilities.

Lock-Up Agreements

We have agreed that for a period of 30 days from the closing of this offering, neither we nor any subsidiary may (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock; or (ii) file or caused to be filed any registration statement with the SEC other than this registration statement, subject to certain exceptions. In addition, we have agreed not to effect or enter into an agreement to effect any issuance by us or our subsidiaries of any securities that involve a variable rate transaction (as defined in the securities purchase agreement) for a period of one year following the closing date of this offering, subject to certain exceptions. The placement agent may waive this prohibition in its sole discretion and without notice.

Additionally, each of our executive officers and directors has agreed with the placement agent, subject to certain exceptions, not to offer, sell, dispose of or hedge any shares of our common stock or common stock equivalents, for a period of 90 days from the closing of the offering pursuant to this prospectus.

Right of First Refusal

We have granted the placement agent a right of first refusal for a period of 12 months following the closing of this offering to act as sole book-running manager, sole underwriter or sole placement agent, as applicable, for each and every future public and private equity offering, debt financing or refinancing, or acquisition or disposition by us or any of our successors or subsidiaries.

Tail

We have also agreed to pay the placement agent a tail fee equal to the full cash fee and warrant compensation described above if any investor who was contacted or introduced to us by the placement agent during this offering provides us with capital in any public or private offering or other financing or capital raising transaction during the 12-month period following the expiration or termination of our engagement with the placement agent.

Regulation M Compliance

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any fees received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the placement agent. Under these rules and regulations, the placement agent may not (i) engage in any stabilization activity in connection with our securities and (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Determination of Offering Price

The actual public offering price of the securities we are offering will be negotiated between us and the investors, in consultation with the placement agent, based on the trading of our common stock prior to the offering, among other things. Other factors considered in determining the public offering price of the securities we are offering include our history and prospects, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, the general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant. The public offering price per share (or pre-funded warrant) will be fixed for the duration of this offering.

Electronic Distribution

A prospectus in electronic format may be made available on a website maintained by the placement agent, and the placement agent may distribute prospectuses electronically. Other than the prospectus in electronic format, the information on any such website is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or the placement agent, and should not be relied upon by investors.

Other Relationships

From time to time, the placement agent may provide, in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which it may receive customary fees and commissions. Except as disclosed in this prospectus, we have no present arrangements with the placement agent for any services. In addition, in the ordinary course of their business activities, the placement agent and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The placement agent and its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, LLC. The transfer agent's address is 48 Wall Street, 23rd floor, New York, NY 10043.

Market Listing

Our common stock is listed on Nasdaq under the symbol "ARTL." There is no established trading market for the pre-funded warrants and we do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Fennemore Craig, P.C., Reno, Nevada. Certain other legal matters will be passed upon for us by Bevilacqua PLLC. Certain legal matters in connection with the offering will be passed upon for the placement agent by Zarif Law Group P.C.

Bevilacqua PLLC holds 2,691 shares of common stock and 8,071 shares of common stock issuable upon exercise of warrants, which it received as part of the June 2025 private placement.

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 the Company's 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 have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the securities offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us or our securities offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. 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 each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement.

We file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available for inspection and copying at the SEC's public reference facilities and the website of the SEC at www.sec.gov. Additionally, we will make these filings available, free of charge, on our website at www.artelobio.com as soon as reasonably practicable after we electronically file such materials with, or furnish them to, the SEC.

You may request a copy of this prospectus by contacting us at: Artelo Biosciences, Inc. at 505 Lomas Santa Fe, Suite 160, Solana Beach, CA or 858-925-7049. Our website address is www.artelobio.com and such reports and documents may be accessed from <https://ir.artelobio.com/>. Information contained on or accessible through Artelo's website is not a part of the registration statement of which this prospectus forms a part, and the inclusion of Artelo's website address in this prospectus is an inactive textual reference only.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding those portions of any Form 8-K that are not deemed “filed” pursuant to the General Instructions of Form 8-K):

- 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 [January 2, 2026](#), [January 16, 2026](#), [January 30, 2026](#), [February 5, 2026](#), [February 5, 2026](#), [March 6, 2026](#), [March 17, 2026](#), and [March 18, 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.

This prospectus forms part of a registration statement on Form S-1 that we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement or the documents incorporated by reference herein and therein. For further information with respect to us and the securities that we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement and the documents incorporated by reference herein and therein. You should rely only on the information incorporated by reference or provided in this prospectus and registration statement. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus and the documents incorporated by reference herein and therein is accurate as of any date other than the respective dates thereof.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

We will provide you without charge, upon your oral or written request, with a copy of any or all reports, proxy statements and other documents we file with the SEC, as well as any or all of the documents incorporated by reference in this prospectus or the registration statement (other than exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents). Requests for such copies should be directed to Artelo Biosciences, Inc., Attn: Chief Executive Officer, 505 Lomas Santa Fe, Suite 160, Solana Beach, California, 92075. You may also direct any requests for documents to us by telephone at (858) 925-7049.



**1,641,587 Shares of Common Stock or Pre-funded Warrant to Purchase 1,641,587 Shares of Common Stock,
Placement Agent Warrants to Purchase up to 131,327 Shares of Common Stock,
and
Up to 1,772,914 Shares of Common Stock Underlying the Pre-Funded Warrants and Placement Agent Warrants**

PRELIMINARY PROSPECTUS

Craft Capital Management LLC

March 23 , 2026

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses paid or payable by the registrant in connection with this offering. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee.

	Amount Paid or to Be Paid
SEC registration fee	\$ 1,789.78
FINRA filing fee	2,300.00
Printing expenses	2,000.00
Legal fees and expenses	80,000.00
Accounting fees and expenses	40,000.00
Other fees and expenses	13,910.22
Total	\$ 140,000.00

Item 14. Indemnification of Directors and Officers.

The Company's Articles of Incorporation and Bylaws provide that, to the fullest extent permitted by the laws of the State of Nevada, the Company shall indemnify any officer or director of the Company, who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he/she is or was or has agreed to serve at the request of the Company as a director, officer, employee or agent of the Company, or while serving as a director or officer of the Company, is or was serving or has agreed to serve at the request of the Company as a director, officer, employee or agent (which, for purposes hereof, shall include a trustee, partner or manager or similar capacity) of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity. For the avoidance of doubt, the foregoing indemnification obligation includes, without limitation, claims for monetary damages against the indemnitee to the fullest extent permitted under Section 78.7502 of the Nevada Revised Statutes.

The indemnification provided shall be from and against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the indemnitee or on the indemnitee's behalf in connection with such action, suit or proceeding and any appeal therefrom, but shall only be provided if the indemnitee acted in good faith and in a manner that the indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action, suit or proceeding, had no reasonable cause to believe the indemnitee's conduct was unlawful.

In the case of any threatened, pending or completed action or suit by or in the right of the Company to procure a judgment in its favor by reason of the fact that he/she is or was a director, officer, employee or agent of the Company, or while serving as a director or officer of the Company, is or was serving or has agreed to serve at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, no indemnification shall be made in respect of any claim, issue or matter as to which the indemnitee shall have been adjudged to be liable to the Company unless, and only to the extent that, the Nevada courts or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, the indemnitee is fairly and reasonably entitled to indemnity for such expenses which the Nevada courts or such other court shall deem proper.

The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that he/she did not act in good faith and in a manner which the indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the indemnitee's conduct was unlawful.

To the extent that indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. If a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person of our company in the successful defense of any action, suit or proceeding) is asserted by any of our directors, officers or controlling persons in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of that issue.

The rights conferred in the Company's Articles of Incorporation and Bylaws are not exclusive, and the Company is authorized to enter into indemnification agreements with its directors, officers, employees, and agents and to obtain insurance to indemnify such persons. The Company may not retroactively amend the Bylaws to reduce its indemnification obligations to directors, officers, employees, and agents.

The Company has entered into indemnification agreements with its directors and executive officers that provide the maximum indemnity allowed to directors and executive officers by Section 78.7502 of the Nevada Revised Statutes and also to provide for certain additional procedural protections, in addition to the indemnification provided for in the Company's Articles of Incorporation and Bylaws, and intends to enter into indemnification agreements with any new directors and executive officers in the future.

The Company has purchased and currently intends to maintain insurance on behalf of each and any person who is or was a director or officer of the Company against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The placement agency agreement between the Company and the placement agent (Exhibit 1.1 hereto) provides for indemnification by the Company of the placement agent for certain liabilities, including liabilities arising under the Securities Act.

See also the undertakings set out in response to Item 17 herein.

Item 15. Recent Sales of Unregistered Equity Securities.

We have sold the securities described below within the past three years which were not registered under the Securities Act. All of the sales listed below were made pursuant to an exemption from registration afforded by Section 4(a)(2) of the Securities Act (and Regulation D thereunder).

On May 13, 2022, we executed a private placement to Lincoln Park Capital Fund, LLC pursuant to which we have the right to sell to Lincoln Park up to \$20,000,000 in shares of our Common Stock, subject to certain limitations, from time to time over the 36-month period commencing on the date that the conditions set forth in the purchase agreement have been satisfied, which includes that a registration statement covering the resale of the shares is declared effective by the SEC. We issued 1,086 shares of our Common Stock to Lincoln Park as consideration for its commitment to purchase our shares under the Purchase Agreement. In the Purchase Agreement, Lincoln Park represented to the Company, among other things, that it was an "accredited investor" (as such term is defined in Rule 501(a) of Regulation D under the Securities Act of 1933, or the Securities Act). The securities were sold by the Company under the Purchase Agreement in reliance upon an exemption from the registration requirements under the Securities Act afforded by Section 4(a)(2) of the Securities Act. As of December 31, 2024, in accordance with the Equity Line, the Company issued 23,633 shares of the Company's Common Stock.

Between April 27, 2025 and May 1, 2025, we entered into subscription agreements with various investors, pursuant to which the Company issued convertible notes to the investors in an aggregate principal amount of \$900,000. A portion of the convertible notes are convertible into shares of our Common Stock, at the election of each investor, and the remaining portion of each note will be converted into warrants to purchase shares of our Common Stock. The sale and issuance of the convertible notes closed on May 1, 2025. The notes accrue interest at a rate of 12.0% per annum. All unpaid principal, together with any then unpaid and accrued interest and other amounts payable thereunder, shall be due and payable on October 28, 2025. Effective October 28, 2025 (the "closing date"), we entered into an agreement with the holders of the convertible notes, pursuant to which we issued and sold to the convertible note holders, by converting all or a portion of the unconverted "Voluntary Conversion" portion of unpaid principal balance and accrued interest due to the convertible noteholders upon the maturity of the convertible notes: (i) newly issued convertible notes in an aggregate principal amount of \$690,154.69; and (ii) five-year warrants to purchase an aggregate of 146,067 shares of common stock, at an exercise price of \$10.20 per share. The newly issued convertible notes will accrue interest at a rate of 12% per annum, which will adjust to 20% upon an event of default (as defined therein). All unpaid principal, together with any then unpaid and accrued interest and other amounts payable thereunder, shall be due and payable six months after the closing date.

On June 24, 2025, the Company entered into a securities purchase agreement with certain accredited investors for the issuance and sale in a private placement of (i) 45,615 shares of Common Stock, (ii) up to 31,060 shares of Common Stock issuable upon the exercise of pre-funded warrants (the “Pre-Funded Warrants”), (iii) up to 153,351 shares of Common Stock issuable upon the exercise of common warrants at an exercise price of \$17.46 per share (the “\$17.46 Warrants”), and (iv) 76,678 shares of Common Stock issuable upon the exercise of warrants at an exercise price of \$30.00 per share (the “\$30.00 Warrants”). The private placement was priced at the market on June 24, 2025 and closed on June 26, 2025. Each share or, in lieu of shares, each Pre-Funded Warrant, was issued and sold in the private placement along with two (2) \$17.46 Warrants and one (1) \$30.00 Warrant. The combined purchase price for the securities was (i) \$18.585 per share of Common Stock and three accompanying warrants and (ii) \$18.582 per Pre-Funded Warrant and three accompanying warrants.

On August 1, 2025, we entered into a securities purchase agreement (the “Purchase Agreement”) for an at-the market PIPE (private investment in public equity) for the purchase and sale of securities at a price of \$31.35 per security, consisting of: (a) 302,229 shares of Common Stock (or pre-funded warrants in lieu thereof); (b) three-year warrants to purchase 302,229 shares of Common Stock at an exercise price of \$30.60 per share; and (c) three-year warrants to purchase 302,229 shares of Common Stock at an exercise price of \$150.00 per share, for expected aggregate gross proceeds of approximately \$9.475 million. We agreed that the net proceeds of the sale would be used to purchase Solana. However, on August 19, 2025, we entered into a Termination and Mutual Release Agreement (the “Purchase Termination Agreement”), which terminates in its entirety, effective as of the August 19, 2025, the Purchase Agreement, the three-year warrants, and any other certificates, agreements, or instruments executed in connection therewith. Concurrently with execution of the Purchase Termination Agreement, the Company paid \$50,000 to TingleMerrett LLP, counsel to the investors, for legal fees incurred by the investors in connection with the transaction.

Effective October 28, 2025, we entered into the October 2025 Subscription Agreement with such investors, pursuant to which we issued and sold to such investors, and such investors purchased (by converting all or a portion of the unconverted “Voluntary Conversion” portion of unpaid principal balance and accrued interest due to such investors upon the maturity of the May 2025 Notes): (i) the Notes in an aggregate principal amount of \$690,154.69; and (ii) the \$10.20 Warrants to purchase an aggregate of 146,067 shares of Common Stock, at an exercise price of \$10.20 per share. The sale and issuance of the Notes and \$10.20 Warrants closed effective as of the Closing Date.

On January 30, 2026, in connection with our entry into the ELOC Purchase Agreement with Square gate, we issued an aggregate of 97,466 Commitment Shares having a stated aggregate value of \$500,000, consisting of 35,342 shares of our common stock and pre funded warrants to purchase up to 62,124 shares of our common stock at an exercise price of \$0.001 per share, with no expiration date. These securities were issued as a commitment fee pursuant to the ELOC Purchase Agreement with Square Gate. No underwriting discounts or commissions were paid with respect to these issuances.

On March 12, 2026, we entered into a securities purchase agreement with Vanquish Funding Group Inc., pursuant to which we issued a 12% bridge note that matures on January 15, 2027, in the aggregate principal amount of \$237,300, which includes an original issue discount of \$27,300, for an aggregate purchase price of \$210,000. Solely upon the occurrence and continuation of an Event of Default (as defined in the bridge note), the buyer shall have the right, but not the obligation, to convert all or any portion of the outstanding balance of the bridge note, including principal, accrued interest, and any applicable default amount, into shares of our common stock. The conversion price is the greater of (i) \$0.125 and (ii) 75% of the lowest trading price of our common stock during the ten (10) trading days immediately preceding the applicable conversion date.

On March 12, 2026, we entered into a securities purchase agreement with Boot Capital LLC, pursuant to which we issued a 12% bridge note that matures on January 15, 2027, in the aggregate principal amount of \$113,000, which includes an original issue discount of \$13,000, for an aggregate purchase price of \$100,000. Solely upon the occurrence and continuation of an Event of Default (as defined in the bridge note), the buyer shall have the right, but not the obligation, to convert all or any portion of the outstanding balance of the bridge note, including principal, accrued interest, and any applicable default amount, into shares of our common stock. The conversion price is the greater of (i) \$0.125 and (ii) 75% of the lowest trading price of our common stock during the ten (10) trading days immediately preceding the applicable conversion date.

Each of the foregoing issuances was made in a transaction not involving a public offering pursuant to an exemption from the registration requirements of the Securities Act in reliance upon Section 4(a)(2) of the Securities Act, or Regulation D or Regulation S promulgated under the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Exhibit No.	Description
1.1	Form of Placement Agency Agreement (incorporated by reference to Exhibit 1.1 to the Form S-1 filed on March 20, 2026)
3.1	Articles of Incorporation, as amended (incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed on May 11, 2023)
3.2	Certificate of Change (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on June 13, 2025)
3.3	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on April 21, 2023)
3.4	Certificate of Amendment to Bylaws (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on September 10, 2025)
3.5	Certificate of Amendment to Bylaws (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on November 14, 2025)
3.6	Certificate of Change (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on March 6, 2026)
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-8 filed on December 16, 2020)
4.2	Form of Warrant (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on May 1, 2025)
4.3	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on June 26, 2025)
4.4	Form of \$5.82 Warrant (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed on June 26, 2025)
4.5	Form of \$10.00 Warrant (incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed on June 26, 2025)
4.6	Form of Prefunded Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on August 4, 2025)
4.7	Form of Market Priced Warrant (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed on August 4, 2025)
4.8	Form of \$50.00 Warrant (incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed on August 4, 2025)
4.9	Common Stock Warrant issued to ABK Labs, Inc., dated August 1, 2025 (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on August 7, 2025)
4.10	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on September 5, 2025)
4.11	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on October 1, 2025)
4.12	Form of Convertible Note (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on October 31, 2025)
4.13	Form of Warrant (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on October 31, 2025)
4.14	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on February 5, 2026)
4.15	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.15 to the Form S-1 filed on March 20, 2026)
4.16	Form of Placement Agent Warrant (incorporated by reference to Exhibit 4.16 to the Form S-1 filed on March 20, 2026)
5.1	Opinion of Fennemore Craig, P.C. (incorporated by reference to Exhibit 5.1 to the Form S-1 filed on March 20, 2026)
10.1	Securities Purchase Agreement by and between the Company and Gregory D. Gorgas dated April 3, 2017 (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on April 7, 2017)
10.2+	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on May 8, 2017)
10.3	Stock Purchase Agreement dated May 4, 2017 (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed on May 8, 2017)
10.4	Form of Private Placement Subscription Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on August 4, 2017)
10.5	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on August 4, 2017)
10.6	Stock Purchase Agreement dated August 1, 2017 (incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K filed on August 4, 2017)
10.7+	Material and Data Transfer, Option and License Agreement dated as of December 20, 2017 by and between the Company and NEOMED Institute (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on January 16, 2018)

10.8+	First Amendment to Material and Data Transfer, Option and License Agreement by and between the Company and NEOMED Institute, dated as of January 4, 2019 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on April 15, 2019).
10.9+	License Agreement with Stony Brook University, by and between the Company and Stony Brook University, dated January 18, 2018 (incorporated by reference to Exhibit 10.20 to the Registration Statement on Form S-1/A filed on April 17, 2018).
10.10#	2018 Equity Incentive Plan, as amended, and Forms of Award Agreement thereunder (incorporated by reference to Exhibit 99.1 to the Registration Statement on Form S-8 filed on December 16, 2020).
10.11#	Amended and Restated Employment Agreement by and between the Company and Gregory D. Gorgas dated August 30, 2019 (incorporated by reference to Exhibit 10.3 to the Annual Report on Form 10-K filed on November 25, 2019).
10.12#	Amendment to Amended and Restated Employment Agreement by and between the Company and Gregory D. Gorgas dated October 26, 2025 (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on October 27, 2025).
10.13	Form of Note and Warrant Subscription Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on May 1, 2025).
10.14	Form of Convertible Note (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on May 1, 2025).
10.15	Form of Securities Purchase Agreement by and between Artelo Biosciences Inc. and the purchasers named therein (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on June 26, 2025).
10.16	At-The-Market Offering Agreement by and among the Company and R.E. Lafferty & Co., Inc., dated as of July 18, 2025 (incorporated by reference to Exhibit 1.1 to the Current Report on Form 8-K filed on July 18, 2025).
10.17	Form of Securities Purchase Agreement by and between Artelo Biosciences, Inc. and the investors named therein (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on August 4, 2025).
10.18	Form of Termination and Mutual Release Agreement by and between Artelo Biosciences, Inc. and the investors named therein (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on August 20, 2025).
10.19	Consulting Agreement by and between Artelo Biosciences, Inc. and ABK Labs, Inc., dated August 1, 2025 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on August 7, 2025).
10.20	Termination Agreement by and between Artelo Biosciences, Inc. and ABK Labs, Inc., dated August 19, 2025 (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on August 20, 2025).
10.21	Cooperation Letter Agreement dated October 15, 2025, among the Company and the Farb Parties (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on October 17, 2025).
10.22#	Employment Agreement by and between the Company and Mark E. Spring dated October 26, 2025 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on October 27, 2025).
10.23	Form of Subscription Agreement by and between Artelo Biosciences Inc. and the purchasers named therein (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on October 31, 2025).
10.24	Equity Purchase Agreement, dated as of January 30, 2026, by and between Artelo Biosciences, Inc. and Square Gate Capital Master Fund, LLC - Series 5 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on February 5, 2026).
10.25	Registration Rights Agreement, dated as of January 30, 2026, by and between Artelo Biosciences, Inc. and Square Gate Capital Master Fund, LLC - Series 5 (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on February 5, 2026).
10.26	Securities Purchase Agreement, dated as of March 12, 2026, by and between Artelo Biosciences, Inc. and Vanquish Funding Group Inc. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on March 18, 2026).
10.27	Securities Purchase Agreement, dated as of March 12, 2026, by and between Artelo Biosciences, Inc. and Boot Capital LLC (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on March 18, 2026).
10.28	Bridge Note, dated March 12, 2026, by and between Artelo Biosciences, Inc. and Vanquish Funding Group Inc. (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed on March 18, 2026).
10.29	Bridge Note, dated March 12, 2026, by and between Artelo Biosciences, Inc. and Boot Capital LLC (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed on March 18, 2026).
10.30	Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.30 to the Form S-1 filed on March 20, 2026).
23.1	Consent of MaloneBailey, LLP, independent registered public accounting firm (incorporated by reference to Exhibit 23.1 to the Form S-1 filed on March 20, 2026).
23.2	Consent of Fennemore Craig, P.C. (included in Exhibit 5.1).
24.1	Power of Attorney (incorporated by reference to Exhibit 24.1 to the Form S-1 filed on March 20, 2026).
107	Filing Fee Table (incorporated by reference to Exhibit 107 to the Form S-1 filed on March 20, 2026).

† Management contracts or compensatory plans, contracts or arrangements.

Certain portions of this exhibit have been omitted.

(b) Financial Statement Schedules.

All financial statement schedules are omitted because the information called for is not required or is shown either in the financial statements or in the notes thereto.

Item 17. Undertakings.

(a) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(b) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424 (§230.424 of this chapter);

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(5) That, for purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(6) That, for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Solana Beach, State of California, on March 23, 2026.

ARTELO BIOSCIENCES, INC.

By: /s/ Gregory D. Gorgas

Name: Gregory D. Gorgas

Title: President & Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Gregory D. Gorgas</u> Gregory D. Gorgas	President, Chief Executive Officer and Director (Principal Executive Officer)	March 23, 2026
* <u>Mark E. Spring</u>	Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	March 23, 2026
* <u>Connie Matsui</u>	Director, Chair of the Board	March 23, 2026
* <u>Steven Kelly</u>	Director	March 23, 2026
* <u>Douglas Blayney, M.D.</u>	Director	March 23, 2026
* <u>R. Martin Emanuele, Ph.D.</u>	Director	March 23, 2026
* <u>Gregory Reyes, M.D., Ph.D.</u>	Director	March 23, 2026
* <u>Tamara A. Favorito</u>	Director	March 23, 2026

* By /s/ Gregory D. Gorgas
Gregory D. Gorgas
Attorney-In-Fact