As Filed with the Securities and Exchange Commission on July 20, 2026

Registration No. 333-

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

Form S-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Aterian, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	83-1739858
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

350 Springfield Avenue Suite #200
Summit, NJ 07901
(347) 676-1681
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

David Lazar
Chief Executive Officer
Aterian, Inc.
350 Springfield Avenue Suite #200
Summit, NJ 07901
(781) 996-5252 (Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Rick A. Werner, Esq.
Alla Digilova, Esq.
Haynes and Boone, LLP
30 Rockefeller Plaza, 26th Floor
New York, New York 10112
(212) 659-7300

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ☐

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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, please 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ☐

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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 for complying with any new or revised financial 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 said Section 8(a) may determine.

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

Subject to Completion, dated July 20, 2026

PROSPECTUS

Aterian, Inc.

6,737,500 Shares of Common Stock

This prospectus relates to the resale by the selling stockholders named in this prospectus from time to time of up to 6,737,500 shares of our Common Stock (the "Series AA Conversion Shares"), par value $0.0001 per share (the "Common Stock") issuable upon the conversion of an aggregate of 875,000 shares of Series AA Convertible Non-Redeemable Preferred Stock, par value $0.0001 per share (the "Series AA Preferred Stock"), with each share of Series AA Preferred Stock convertible into 7.7 shares of Common Stock.

The Series AA Conversion Shares are referred to herein as the "Securities." We shall bear all of the expenses incurred in connection with the registration of these shares. The selling stockholders will pay or assume discounts, commissions, fees of underwriters, selling brokers or dealer managers and similar expenses, if any, incurred for the sale of these shares of our Common Stock.

The selling stockholders identified in this prospectus, or their donees, pledgees, transferees or other successors-in-interest, may offer the shares from time to time on terms to be determined at the time of sale through ordinary brokerage transactions or through any other means described in this prospectus under the caption "*Plan of Distribution*." The shares may be sold at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale or at negotiated prices. For a list of the selling stockholders, see the section entitled "Selling Stockholders" on page 11 of this prospectus.

Our registration of the shares of Common Stock covered by this prospectus does not mean that the selling stockholders will offer or sell any of such shares of Common Stock. The selling stockholders named in this prospectus, or their donees, pledgees, transferees or other successors-in-interest, may resell the shares of Common Stock covered by this prospectus through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. For additional information on the possible methods of sale that may be used by the selling stockholders, you should refer to the section of this prospectus entitled "*Plan of Distribution*."

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

No underwriter or other person has been engaged to facilitate the sale of the Common Stock in this offering. We will bear all costs, expenses and fees in connection with the registration of the Common Stock. The selling stockholders will bear all commissions and discounts, if any, attributable to their respective sales of our Common Stock.

Our Common Stock is traded on the Nasdaq Capital Market ("Nasdaq") under the symbol "ATER." On July 17, 2026, the closing sale price of our Common Stock on Nasdaq was $1.30 per share.

Investment in our Common Stock involves risk. See "Risk Factors" contained in this prospectus on page 5, under similar headings in our annual and periodic reports filed from time to time with the Securities and Exchange Commission, which are incorporated by reference in this prospectus and in any applicable prospectus supplement. You should carefully read this prospectus, together with the documents we incorporate by reference herein, before you invest in our Common Stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or the accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2026.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of the registration statement that we filed with the Securities and Exchange Commission (the "SEC") pursuant to which the selling stockholders named herein may, from time to time, offer and sell or otherwise dispose of the shares of our Common Stock covered by this prospectus. As permitted by the rules and regulations of the SEC, the registration statement filed by us includes additional information not contained in this prospectus.

This prospectus and the documents incorporated by reference into this prospectus include important information about us, the securities being offered and other information you should know before investing in 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 or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or shares of Common Stock 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, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under "*Where You Can Find More Information*" and "*Incorporation of Certain Information by Reference*" in this prospectus.

You should rely only on this prospectus and the information incorporated or deemed to be incorporated by reference in this prospectus. We have not, and the selling stockholders have not, authorized anyone to give any information or to make any representation to you other than those contained or incorporated by reference in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

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

Unless otherwise indicated, information contained or incorporated by reference in this prospectus concerning our industry, including our general expectations and market opportunity, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry's future performance are necessarily uncertain due to a variety of factors, including those described in "*Risk Factors*" beginning on page 6 of this prospectus. These and other factors could cause our future performance to differ materially from our assumptions and estimates.

Unless the context otherwise indicates, references in this prospectus to "we," "our" and "us" refer, collectively, to Aterian, Inc., a Delaware corporation, and its consolidated subsidiaries.

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere or incorporated by reference in this prospectus and does not contain all of the information you should consider before investing in our securities. You should carefully read the prospectus, the information incorporated by reference and the registration statement of which this prospectus is a part in their entirety before investing in our securities, including the information discussed under "Risk Factors" in this prospectus and the documents incorporated by reference and our financial statements and related notes that are incorporated by reference in this prospectus. In this prospectus, unless the context indicates otherwise, "ATER," "Aterian," the "Company," the "registrant," "we," "us," "our," or "ours" refer to Aterian, Inc. and its subsidiaries.

Overview

We are a consumer products company that has historically predominantly operated through online retail channels such as Amazon, Walmart, and Target, as well as its own direct-to-consumer websites. Prior to the Asset Sale (as defined below), the Company has operated its owned brands, which were either incubated or acquired, selling products in multiple categories, including home and kitchen appliances, kitchenware, air quality appliances, health and beauty products, and essential oils.

Headquartered in New Jersey, we also maintain offices in China, the Philippines, and the United Kingdom.

Asset Purchase Agreement

On April 27, 2026, we and Trademark Global, LLC ("Trademark Global") entered into an Asset Purchase Agreement (the "Asset Purchase Agreement"), pursuant to which Trademark Global has agreed to acquire certain of our specified assets and liabilities, including, among other things, assets associated with our marquee brands: Mueller Living, PurSteam, hOmeLabs, Squatty Potty, Healing Solutions, and Photo Paper Direct for $18 million in cash, subject to certain purchase price adjustments (the "Asset Sale"). Certain of our assets and liabilities are expressly excluded from the Asset Sale, including, among other things, the following: (i) assets: all cash, any equity interests held by us, contracts that are not considered acquired assets, certain Amazon accounts, certain intellectual property, corporate books and records, benefit plans, and certain tax assets and (ii) liabilities: liabilities related to any excluded assets, certain employee liabilities, liabilities under our benefit plans, pre-closing liabilities under purchased contracts, certain taxes and indebtedness.

The Asset Sale was consummated on July 17, 2026. Following the Asset Sale, Aterian expects to continue to operate its smaller remaining legacy brands such as Vremi and Xtava.

April 2026 Private Placement

On April 27, 2026, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with David Lazar, pursuant to which we agreed to issue and sell, in a private placement, 1,750,000 shares of our Series AA Preferred Stock and 1,750,000 shares of our Series AAA Preferred Stock in two closings for aggregate gross proceeds of up to $7.0 million, subject to the terms and conditions set forth in the Purchase Agreement (collectively, the "Private Placement").

The Purchase Agreement contains certain representations and warranties, covenants and indemnification provisions customary for similar transactions. The representations, warranties and covenants contained in the Purchase Agreement were made solely for the benefit of the applicable parties to the Purchase Agreement and may be subject to limitations agreed upon by the applicable contracting parties. Among other covenants, the Purchase Agreement required the Company to use commercially reasonable efforts to hold a special meeting of stockholders no later than July 20, 2026, and include, among other things, proposals for (i) the issuance of Common Stock to Lazar in compliance with the rules and regulations of the Nasdaq Stock Market LLC ("Nasdaq") upon conversion of the Preferred Stock, (ii) an amendment to the Company's amended and restated certificate of incorporation that increases the authorized shares of Common Stock from 500,000,000 up to 1,000,000,000, (iii) the election of four (4) additional designees of David Lazar to the Company's Board of Directors (the "Board") and (iv) a reverse stock split of the Common Stock in the range of 1-for-2 to 1-for-99 (collectively, the "Stockholder Approval"). The Stockholder Approval was obtained at the Company's special meeting of stockholders held on July 17, 2026 (the "Special Meeting").

The first closing (the “First Closing”) of the Private Placement in connection with the Series AA Preferred Stock occurred on April 27, 2026, pursuant to which we issued and sold to David Lazar an aggregate of 1,750,000 shares of Series AA Preferred Stock at a price per share equal to $2.00, for aggregate gross proceeds of $3.5 million. Each share of Series AA Preferred Stock is convertible into 7.7 shares of Common Stock for an aggregate total of 13,475,000 shares of Common Stock issuable upon conversion of the Series AA Preferred Stock.

The terms of the Series AA Preferred Stock are as set forth in the Certificate of Designation of the Series AA Convertible Non-Redeemable Preferred Stock (the “Series AA Certificate of Designation”), which was filed and became effective with the Secretary of State of the State of Delaware on April 27, 2026.

The second closing (the “Second Closing”) of the Private Placement in connection with the Series AAA Preferred Stock occurred on July 17, 2026, pursuant to which we issued and sold to David Lazar an aggregate of 1,750,000 shares of Series AAA Preferred Stock at a price per share equal to $2.00, for aggregate gross proceeds of $3.5 million. Each share of Series AAA Preferred Stock is convertible into 135.1 shares of Common Stock for an aggregate total of 236,425,000 shares of Common Stock issuable upon conversion of the Series AAA Preferred Stock. The terms of the Series AAA Preferred Stock are as set forth in the Certificate of Designation of the Series AAA Convertible Non-Redeemable Preferred Stock (the “Series AAA Certificate of Designation” and, together with the Series AA Certificate of Designation, the “Certificates of Designations”), which was filed and became effective with the Secretary of State of the State of Delaware on July 17, 2026. The terms of the Series AAA Preferred Stock are substantially similar to the terms of the Series AA Preferred Stock.

The Private Placement is exempt from the registration requirements of the Securities Act of 1933, as amended (the “Securities Act”), pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D of the Securities Act and in reliance on similar exemptions under applicable state laws. David Lazar has represented to us that he is an accredited investor within the meaning of Rule 501(a) of Regulation D and that he is acquiring the securities for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof. The shares of Preferred Stock were offered and sold without any general solicitation by us or our representatives.

In connection with the transactions contemplated by, and immediately prior to the execution of, the Purchase Agreement, the Board increased the authorized number of directors to five and appointed David Lazar to the Board to fill the vacancy created by such increase, effective as of April 27, 2026, as a Class II director with a term expiring at the Company’s 2027 annual meeting of stockholders. Pursuant to the Purchase Agreement, following receipt of the Stockholder Approval, David Lazar has the right to recommend to the Company up to four individuals to be nominated for election at such meeting (the “Board Nomination Rights”), provided that such right shall at all times be subject to, and in compliance with, Nasdaq Listing Rule 5640. On July 17, 2026, pursuant to the Board Nomination Rights, at the Special Meeting, (i) Avraham Ben-Tzi was nominated and elected as a Class II director to serve until the 2027 annual meeting of stockholders or until his successor has been duly elected and qualified, and (ii) David Natan was nominated and elected as a Class III director to serve until the 2028 annual meeting of stockholders or until his successor has been duly elected and qualified (together, the “Lazar Nominees”). Although David Lazar has the right to designate four director nominees, David Lazar chose to nominate only two designees for election at the Special Meeting. Mr. Lazar may nominate the other two (2) directors at a later time at his discretion following the Second Closing. In connection with the election of the Lazar Nominees, Bari A. Harlam, and Susan Lattmann have agreed to step down from the Board immediately following the Special Meeting.

Preferred Stock

Each share of Series AA Preferred Stock is convertible into 7.7 shares of Common Stock, and each share of Series AAA Preferred Stock is convertible into 135.1 shares of Common Stock.

The number of shares of Common Stock into which the Series AA Preferred Stock is convertible is based on the "Conversion Price" of $0.25974, or such higher minimum price as may be required from time to time by the Nasdaq Stock Market, in each case, subject to adjustment from time to time in accordance with the Series AA Certificate of Designation.

The number of shares of Common Stock into which the Series AAA Preferred Stock is convertible is based on the "Conversion Price" as determined pursuant to the terms of the Purchase Agreement.

In each case, the Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications, stock combinations and similar events, and is subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Conversion Price (subject to certain exceptions).

The Preferred Stock ranks:

- senior to all of the Common Stock;
- senior to any class or series of capital stock of the Company hereafter created specifically ranking by its terms junior to the Preferred Stock ("Junior Securities"); and
- on parity with each other (i.e., Series AA Preferred Stock shall rank pari passu with the Series AAA Preferred Stock)

in each case, as to distributions of assets upon liquidation, dissolution or winding up of the Company, whether voluntarily or involuntarily (each, a "Dissolution").

In the event of a Dissolution, holders of the Preferred Stock will be entitled to receive, before any distributions to the holders of the Common Stock and the holders of Junior Securities, an amount per share of Preferred Stock equal to the greater of (i) $2.00 (subject to adjustment in the event of any stock split, combination or reclassification), plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of the Preferred Stock been converted into Common Stock (without regard to any restrictions on conversion) immediately prior to such Dissolution. Shares of Preferred Stock will be entitled to receive dividends equal to (on an as-if-converted-to-Common Stock basis), and in the same form and manner as, dividends actually paid on shares of Common Stock. For the avoidance of any doubt, neither a change in control of the Company, the merger or consolidation of the Company with or into any other entity, nor the sale, lease, exchange or other disposition of all or substantially all of the Company's assets shall, in and of itself, be deemed to constitute a Dissolution.

Shares of Preferred Stock will generally have no voting rights, except to the extent provided by applicable law, and except that the consent of the holders of a majority of the outstanding shares of the Preferred Stock will be required to (i) alter, repeal or change the powers, preferences or rights of the Preferred Stock or alter or amend the Certificates of Designation so as to adversely affect the Preferred Stock; (ii) supplement, amend, restate, repeal or waive any provision of the Company's amended and restated certificate of incorporation or bylaws, or file any certificate of amendment, certificate of designation, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of or restrictions provided for the benefit of the Preferred Stock, regardless of whether any of the foregoing actions shall be by means of amendment to the Company's amended and restated certificate of incorporation or by merger, consolidation, recapitalization, reclassification, conversion or otherwise; (iii) increase or decrease (other than by conversion) the number of authorized shares of the Preferred Stock; or (iv) enter into any agreement with respect to any of the foregoing.

The holders of the Preferred Stock do not have any right or entitlement to receive or otherwise participate in any dividend or distribution declared or paid by the Board or the Company from the proceeds of the Asset Sale, and no dividends will accrue or be payable on any shares of Preferred Stock or the shares issuable upon the conversion thereof except to the extent dividends are paid on the Common Stock on an as-if-converted basis as described above.

Voting Agreement

In connection with the transactions contemplated by the Purchase Agreement, each of the directors and executive officers of the Company agreed to enter into a voting agreement, dated April 27, 2026 (the "Voting Agreement"), pursuant to which each of them has agreed, in their capacity as stockholders of the Company, to vote all of their shares of Common Stock in favor of all proposals recommended by the Board at the Special Meeting with respect to the Private Placement and at any subsequent meeting of the stockholders of the Company until the termination of the Voting Agreement.

Resignation and Appointment of Chief Executive Officer

Pursuant to the terms of the Purchase Agreement, following the Second Closing, on July 17, 2026, Arturo Rodriguez and the Company mutually agreed to Mr. Rodriguez's separation from his role as Chief Executive Officer of the Company , effective as of the same date. On July 17, 2026, to fill the executive vacancy from Arturo Rodriguez's departure, the Board appointed David Lazar as the Company's Chief Executive Officer, effective as of the same date. In addition, on July 17, 2026, David Lazar was appointed as Chairperson of the Board.

Resignations of Directors

Bari A. Harlam, and Susan Lattmann have agreed and have stepped down from the Board (the "Resigning Directors") immediately following the Special Meeting held on July 17, 2026. William Kurtz and Arturo Rodriguez have been nominated as the members of the Special Committee agreed to stay on the Board until September 30, 2026. As set forth in the Securities Purchase Agreement, the Company may create a special committee of the Board (the "Special Committee"), initially consisting of one or more individuals designated by the Board in its sole discretion prior to the Second SPA Closing, to which the Board may delegate prior to the Second SPA Closing the exclusive power, authority and discretion of the Board with respect to the Special Committee Matters (as defined below).

"Special Committee Matters" means (i) establishing, approving, modifying, monitoring and directing the process and procedures related to the review and evaluation of the Asset Sale, including the authority to determine not to proceed with any such process, procedures, review or evaluation, (ii) soliciting, for informational purposes, expressions of interest or other proposals for a transaction similar to the Asset Sale to the extent the Special Committee deems appropriate, (iii) responding, or declining to respond, to any communications, inquiries or proposals regarding the Asset Sale, (iv) reviewing, evaluating, investigating, pursuing, negotiating and approving the terms and conditions of the Asset Sale, including any definitive agreements governing the Asset Sale, (v) determining on behalf of the Board whether the Asset Sale is advisable and is fair to, and in the best interests of, the Company and its stockholders, (vi) determining whether to approve and consummate or reject the Asset Sale, in its entirety or in part, (vii) reviewing, analyzing, evaluating and monitoring all proceedings and activities of the Company related to the Asset Sale, (viii) determining if any director, stockholder, member of management, or member of the Special Committee is actually conflicted with respect to the Asset Sale, and if so, to implement appropriate additional procedures or restrictions to manage that conflict, including the exclusive power and authority to remove any such member from the Special Committee that it determines not to be disinterested with respect to the Asset Sale, (ix) investigating the Company, the potential buyers, the Asset Sale and such other matters related thereto as it deems necessary, appropriate or advisable, (x) authorizing the issuance of press releases and other public statements as the Special Committee considers necessary, appropriate or advisable regarding the Asset Sale, (xi) providing the appropriate officers of the Company with the necessary authority to proceed with the Asset Sale on the terms approved by the Special Committee, (xii) authorizing the execution and delivery of any documents, certificates, instructions and agreements necessary, appropriate or advisable in connection with the consummation of the Asset Sale on behalf of the Company and any of its subsidiaries, and (xiii) take such other actions as the Special Committee may deem to be necessary, appropriate or advisable for the Special Committee to discharge its duties.

Implications of Being a Smaller Reporting Company

We are a "smaller reporting company" meaning that the market value of our stock held by non-affiliates is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million. As a smaller reporting company, we may rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Corporate Information

We were incorporated in Delaware under the name Mohawk Group Holdings, Inc. in March 2018 and we changed our name to Aterian, Inc. in April 2021. Our website address is *www.aterian.io*. Our principal executive offices are located at 350 Springfield Avenue Suite #200, Summit, New Jersey 07901, and our telephone number is (347) 676-1681. The information provided on our website does not constitute part of this prospectus and is not incorporated by reference as part of this prospectus.

THE OFFERING

Common Stock to be Offered by the Selling Stockholders	Up to 6,737,500 issuable upon conversion of 875,000 shares of Series AA Preferred Stock.
Use of Proceeds	All shares of our Common Stock offered by this prospectus are being registered for the accounts of the selling stockholders and we will not receive any proceeds from the sale of these shares. See "*Use of Proceeds*" beginning on page 10 of this prospectus for additional information.
Plan of Distribution	The selling stockholders named in this prospectus, or their pledgees, donees, transferees, distributees, beneficiaries or other successors-in-interest, may offer or sell the shares of Common Stock from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. The selling stockholders may also resell the shares of Common Stock to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions. See "*Plan of Distribution*" beginning on page 12 of this prospectus for additional information on the methods of sale that may be used by the selling stockholders.
Nasdaq Capital Market Symbol	Our Common Stock is listed on Nasdaq under the symbol "ATER."
Risk Factors	Investing in our Common Stock involves significant risks. See "*Risk Factors*" beginning on page 6 of this prospectus and under similar headings in the information and documents incorporated by reference in this prospectus.

RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to the other information contained in this prospectus and in the documents we incorporate by reference, you should carefully consider the risks discussed below and under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2025 and our Quarterly Report for the quarter ended March 31, 2026, as well as any amendment or update to our risk factors reflected in subsequent filings with the SEC, before making a decision about investing in our securities. The risks and uncertainties discussed below and in the documents incorporated by reference are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our Common Stock could decline and you could lose part or all of your investment.

Risks Related to this Offering and Our Common Stock

The issuance of the shares of Common Stock covered by this prospectus could significantly increase the total number of shares of Common Stock issued and outstanding and thereby cause our existing stockholders to experience substantial dilution.

The shares of Common Stock being offered pursuant to this prospectus represent 50% of the Series AA Conversion Shares issuable upon the conversion of our Series AA Preferred Stock. As of July 17, 2026, there were 10,879,410 shares of Common Stock issued and outstanding (prior to any deemed issuance of any Series AA Conversion Shares). If we are required to issue the maximum number of Series AA Conversion Shares that are being registered hereunder, the number of shares of Common Stock issued and outstanding after such issuance would represent approximately 95.8% of the number of shares of Common Stock issued and outstanding as of the date of this prospectus. As a result, an existing stockholder's proportionate interest in us will be substantially diluted. The actual number of shares of Common Stock that we issue to the selling stockholders may be less than the aggregate number of shares covered by this prospectus.

There is no guarantee that we will continue to meet all requirements for continued listing on the Nasdaq Capital Market. We must continue to satisfy Nasdaq's continued listing requirements, including, among other things, a minimum closing bid price requirement of $1.00 per share.

The continued listing standards of Nasdaq provide, among other things, that a company may be delisted if the bid price of its stock drops below $1.00 for a period of 30 consecutive business days or if stockholders' equity is less than $2,500,000. In the past, we have failed to meet the continued listing requirements of Nasdaq. For example, on December 9, 2025, the Company received a notice from Nasdaq indicating that, based upon the closing bid price of the Company's common stock, par value $0.0001 per share, for the last 30 consecutive business days, the Company is not currently in compliance with the requirement to maintain a minimum bid price of $1.00 per share for continued listing on Nasdaq, as set forth in Nasdaq Listing Rule 5550(a)(2). On May 19, 2026, the Company received formal written notice from Nasdaq indicating that the Company had regained compliance with the Bid Price Requirement for continued listing on the Nasdaq Capital Market, because the closing bid price of the Common Stock had been $1.00 per share or greater for the last 12 consecutive business days from May 1, 2026, to May 18, 2026. Accordingly, Nasdaq has determined that the matter is now closed.

In the future, if our Common Stock falls below the minimum closing bid price of $1.00 per share or otherwise fails to satisfy any of the Nasdaq continued listing requirements, and if we are unable to cure such deficiency during any subsequent cure period, our Common Stock could be delisted from Nasdaq. If our Common Stock ultimately were to be delisted for any reason, we could face significant material adverse consequences, including:

- limited availability of market quotations for our Common Stock;
- a limited amount of news and analyst coverage for us;
- a decreased ability for us to issue additional securities or obtain additional financing in the future;
- limited liquidity for our stockholders due to thin trading; and
- the potential loss of confidence by investors and employees.

The sale of a substantial amount of our shares in the public market could adversely affect the prevailing market price of our securities.

We are registering for resale up to 6,737,500 shares of our Common Stock held by the selling stockholders, which is a significant number of shares compared to the current number of total shares of Common Stock issued and outstanding. Sales of substantial number of shares of our Common Stock in the public market, or the perception that such sales might occur, could adversely affect the market price of our Common Stock. We cannot predict if and when selling stockholders may sell such shares of our Common Stock in the public markets. Furthermore, in the future, we may issue additional shares of our Common Stock or other equity or debt securities convertible into shares of our Common Stock. Any such issuance could result in substantial dilution to our existing stockholders and could cause the market price of our securities to decline.

You may experience future dilution as a result of future equity offerings and other issuances of our securities.

In order to raise additional capital, we may in the future offer additional shares of Common Stock or other securities convertible into or exchangeable for our Common Stock at prices that may not be the same as the price per share paid by the investors in this offering. We may not be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by the investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of Common Stock or securities convertible into shares of Common Stock in future transactions may be higher or lower than the price per share paid to the selling stockholders. Our stockholders will incur dilution upon exercise of any outstanding stock options, warrants or other convertible securities or upon the issuance of shares of Common Stock under our stock incentive programs.

Any additional capital raised through the sale of equity or equity-backed securities may dilute our stockholders' ownership percentages and could also result in a decrease in the market value of our equity securities.

The terms of any securities issued by us in future capital transactions may be more favorable to new investors, and may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have a further dilutive effect on the holders of any of our securities then outstanding.

In addition, we may incur substantial costs in pursuing future capital financing, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. We may also be required to recognize non-cash expenses in connection with certain securities we issue, such as convertible notes and warrants, which may adversely impact our financial condition.

The full-ratchet anti-dilution provisions of the Preferred Stock may result in the issuance of additional shares of Common Stock upon conversion of the Preferred Stock and cause further dilution to our stockholders.

The Preferred Stock is subject to price-based anti-dilution adjustments on a full-ratchet basis. If we issue shares of Common Stock or securities convertible into, exercisable for or exchangeable for shares of Common Stock at an effective price per share below the then-applicable conversion price of the Preferred Stock, the conversion price of the Preferred Stock will be reduced and the number of shares of Common Stock issuable upon conversion of the Preferred Stock may increase. Any such adjustment could result in the issuance of shares of Common Stock in excess of the number of shares covered by this prospectus, cause substantial additional dilution to existing stockholders and adversely affect the market price of our Common Stock.

David Lazar may exert significant influence or control over us, and his interests may conflict with the interests of our other stockholders.

Following conversion of the Preferred Stock, David Lazar is expected to hold a significant percentage of our outstanding Common Stock and voting power. As a result, Mr. Lazar may have the ability to significantly influence or control the outcome of matters requiring Board or stockholder approval, including the election of directors and other corporate actions. This concentration of ownership may delay, deter or prevent a change in control or other transaction involving us and may cause the market price of our Common Stock to decline. Mr. Lazar's interests may not always align with the interests of our other stockholders.

We may become a controlled company within the meaning of Nasdaq rules, which could reduce the corporate governance protections available to our stockholders.

Due to Mr. Lazar’s potential significant ownership of Common Stock following conversion of the Preferred Stock, Mr. Lazar would have the ability to exercise significant influence and control over the outcome of matters requiring Board and stockholder approval, including the election of directors. As a result of Mr. Lazar’s voting power, we may determine that we are a “controlled company” as defined in Nasdaq Listing Rule 5615 and, therefore, would not be subject to the Nasdaq Listing Rules that would otherwise require us to have (a) a majority of independent directors; (b) director nominees selected, or recommended for Board selection, either by a majority of independent directors or a nominations committee composed solely of independent directors; (c) a nominations committee composed solely of independent directors; (d) compensation of our Chief Executive Officer and all other officers determined by a majority of independent directors or a compensation committee composed solely of independent directors; and/or (e) a compensation committee charter that provides the compensation committee with the authority and funding to retain compensation consultants and other advisors.

If we rely on any controlled company exemptions, holders of our Common Stock may not have the same corporate governance protections afforded to stockholders of companies that are subject to all Nasdaq corporate governance requirements. In particular, decisions regarding director nominations and executive compensation may be made with less independent director oversight than would otherwise be required, and Mr. Lazar’s interests may not always align with the interests of our other stockholders.

We have historically operated at a loss and we may never achieve or sustain continuous profitability or positive cash flows. Management has determined that there is substantial doubt about the Company's ability to continue as a going concern.

We have historically operated at a loss and we may never achieve or sustain continuous profitability or positive cash flows. Management has determined that there is substantial doubt about the Company's ability to continue as a going concern.

We have experienced significant after-tax losses for the three months ended March 31, 2026 and 2025. In addition, our costs have increased historically and may increase further in future periods, which could negatively affect our future operating results and ability to achieve and sustain long-term ongoing profitability. For example, we may need to continue to expend substantial financial and other resources on the ideation, sourcing and development of products, our technology infrastructure, sales and marketing, international expansion and general administration, including expenses related to being a public company. We have had to rely on a combination of cash flow from operations and new capital to sustain our business. Although we consummated the Asset Sale on July 17, 2026—pursuant to which Trademark Global, LLC acquired certain of our specified assets and liabilities associated with our marquee brands (Mueller Living, PurSteam, hOmeLabs, Squatty Potty, Healing Solutions, and Photo Paper Direct) for $18 million in cash, subject to certain purchase price adjustments—and expect to continue to operate our smaller remaining legacy brands such as Vremi and Xtava, there can be no assurance that we will ever achieve long-term continuous profitability. Even if we do, there can be no assurance that we will be able to maintain or increase profitability on a quarterly or annual basis. Failure to achieve or sustain profitability could have a material adverse effect on our business.

Our independent registered public accounting firm included an explanatory paragraph in its report on our consolidated financial statements as of and for the year ended December 31, 2025, that raised substantial doubt about our ability to continue as a going concern. If we are unable to continue as a going concern, we may have to make further significant changes to our operating plan, such as delay expenditures. Further, if we are unable to continue as a going concern, we may be forced to liquidate our remaining assets, and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein and therein each contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements contained in this prospectus and the documents incorporated by reference herein other than statements of historical fact, including statements regarding our future operating results and financial position, our business strategy and plans, market growth, and our objectives for future operations, are forward-looking statements. The words such as "believe," "may," "will," "estimate," "potential," "continue," "anticipate," "intend," "expect," "could," "would," "project," "plan," "target," and similar expressions are intended to identify forward-looking statements.

Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- our ability to obtain additional financing;
- our ability to continue as a going concern;
- our ability to maintain compliance with the Nasdaq listing standards;
- our ability to retain our remaining employees, consultants, advisors;
- our expectations regarding our ability to fund our operating expenses, lease and capital expenditure requirements, investments in new business lines and other cash needs with our cash on hand;
- our intellectual property position, including our ability to protect and commercialize proprietary software, data-processing algorithms, trade secrets and related technology;
- our estimates regarding expenses, future revenue, timing of any future revenue, launch, development and commercialization of new products or services, including Preddix, capital requirements and needs for additional financing;
- the impact of government laws and regulations, including those related to prediction markets, gaming, digital assets, stablecoins, data privacy, cybersecurity, artificial intelligence, securities, commodities and financial services;
- our competitive position, including in the consumer products, prediction markets, digital asset and technology sectors;;
- developments relating to our competitors and our industries, including online retail, prediction markets, digital assets, blockchain technology and artificial intelligence;
- our business, business relationships, third-party infrastructure, marketplace, exchange, custodian, banking, on-ramp, off-ramp and technology-provider relationships; and
- the potential impact of global economic, geopolitical, market, technological, regulatory and digital asset developments on our business, operations, strategy and goals.

You should read this prospectus and any related free-writing prospectus and the documents incorporated by reference in this prospectus with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect. The forward-looking statements contained in or incorporated by reference in this prospectus are expressly qualified in their entirety by this cautionary statement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any such statement is made or to reflect the occurrence of unanticipated events.

USE OF PROCEEDS

We are filing the registration statement of which this prospectus is a part to permit the holders of the shares of our Common Stock described in the section entitled "*Selling Stockholders*" to resell such shares. We are not selling any shares under this prospectus, and we will not receive any proceeds from the sale or other disposition of shares of our Common Stock held by the selling stockholders and offered hereby.

The selling stockholders will pay any discounts, commissions, fees of underwriters, selling brokers or dealer managers and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

The shares of Common Stock being offered by the selling stockholders are those previously issued to the selling stockholders, and those issuable to the selling stockholders, upon conversion of the Preferred Stock. For additional information regarding the issuances of the shares of Preferred Stock in the Private Placement, see "*Prospectus Summary – Private Placement of Series AA Preferred Stock and Series AAA Preferred Stock*" above. We are registering the shares of Common Stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except as described below under "*Relationships with the Selling Stockholders,*" the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of Common Stock by each of the selling stockholders. The second column lists the number of shares of Common Stock beneficially owned by each selling stockholder, based on its ownership of our securities as of July 17, 2026, assuming conversion of any shares of Preferred Stock held by the applicable selling stockholder on that date, and without regard to any limitations on exercise, as applicable. The third column lists the shares of Common Stock being offered by this prospectus by the selling stockholders.

This prospectus generally covers the resale of the Series AA Conversion Shares described herein, as determined as if 50% of shares of Series AA Preferred Stock (or 875,000 shares of Series AA Preferred Stock) were converted in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. The fourth and fifth columns assume the sale of all of the shares offered by the selling stockholders pursuant to this prospectus. On July 17, 2026, there were 10,879,410 shares of Common Stock outstanding. The selling stockholders may sell all, some or none of their shares in this offering. See "*Plan of Distribution*."

Name of Selling Stockholder	Number of shares of Common Stock beneficially owned prior to offering	Maximum number of shares of Common Stock to be sold pursuant to this Prospectus	Number of shares of Common Stock beneficially owned after offering	Percentage of Common Stock owned after offering
David Lazar	249,900,000(1)	6,737,500	243,162,500	95.7%

(1) Comprised of an aggregate of (i) 13,475,000 shares of Common Stock issuable upon conversion of an aggregate of 1,750,000 shares of Series AA Preferred Stock beneficially owned by David Lazar, and (ii) 236,425,000 shares of Common Stock issuable upon conversion of an aggregate of 1,750,000 shares of Series AAA Preferred Stock beneficially owned by David Lazar.

Relationships with the Selling Stockholders

David Lazar, a director of the Company and current Chief Executive Officer of the Company, purchased an aggregate of 1,750,000 shares of Series AA Preferred Stock and 1,750,000 shares of Series AAA Preferred Stock in the Private Placement.

PLAN OF DISTRIBUTION

We are registering the shares of Common Stock issued on conversion and issuable upon conversion of the remaining Preferred Stock to permit the resale of such shares of Common Stock underlying the Preferred Stock from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of Common Stock. We will bear all fees and expenses incident to our obligation to register the shares of Common Stock.

Each selling stockholder of the securities and any of their pledgees, assignees and successors-in-interest may sell all or a portion of the shares of Common Stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Common Stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of Common Stock may be sold in one or more transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date this registration statement is declared effective by the SEC;
- broker-dealers may agree with a selling security holder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

In addition, the selling stockholders may transfer the securities by other means not described in this prospectus. If the selling stockholders effect such transactions by selling securities to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the securities for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the securities or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the securities in the course of hedging in positions they assume. The selling stockholders may also sell securities short and deliver securities covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge securities to broker-dealers that in turn may sell such securities.

The selling stockholders may pledge or grant a security interest in some or all of the securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the securities from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the securities in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling stockholders and any broker-dealer participating in the distribution of the securities may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of securities is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of securities being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, the securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the securities may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the securities registered pursuant to the registration statement of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of securities by the selling stockholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the securities to engage in market-making activities with respect to such securities. All of the foregoing may affect the marketability of the securities and the ability of any person or entity to engage in market-making activities with respect to the securities.

We will pay all expenses of the registration of the securities, including, without limitation, SEC filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act in accordance with the registration rights agreements or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the securities will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Haynes and Boone, LLP, New York, New York.

EXPERTS

The consolidated financial statements of Aterian, Inc. as of December 31, 2025, and 2024, and for each of the two years in the period ended December 31, 2025, incorporated by reference in this prospectus, have been audited by UHY LLP, an independent registered public accounting firm, as stated in their report (the report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern). Such consolidated financial statements are incorporated by reference in reliance upon the report of such firm given their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules.

We file annual, quarterly and current reports and other information with the SEC. The SEC maintains an internet website at *www.sec.gov* that contains periodic and current reports, proxy and information statements, and other information regarding registrants that are filed electronically with the SEC.

These documents are also available, free of charge, through the Investors section of our website, which is located at *www.aterian.io*. Information contained on 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.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we have filed with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future documents (excluding information furnished pursuant to Items 2.02 and 7.01 of Form 8-K) we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of this prospectus and prior to the termination of the offering:

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the SEC on March 23, 2026;
- Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2026, filed with the SEC on May 15, 2026;
- Our Current Reports on Form 8-K filed with the SEC on March 17, 2026, April 29, 2026, May 21, 2026, June 26, 2026, and July 10, 2026; and
- The description of our securities that is included in Exhibit 4.9 to our Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 16, 2023, and any amendment or report filed with the SEC for the purpose of updating the description.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. Any statement contained in a document incorporated by reference into this prospectus will be deemed to be modified or superseded for the purposes of this prospectus to the extent that a later statement contained in this prospectus or in any other document incorporated by reference into this prospectus modifies or supersedes the earlier statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

Aterian, Inc.

6,737,500 Shares of Common Stock

PROSPECTUS

PART II:
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by Aterian, Inc. (except any discounts, commissions, fees of underwriters, selling brokers or dealer managers and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares). All amounts shown are estimates except the SEC registration fee.

SEC registration fee	$	1,172.37
Printing fees and expenses	$	2,000
Legal fees and expenses	$	50,000
Accounting fees and expenses	$	20,000]
Miscellaneous fees and expenses	$	-
Total	$	73,172.37

Item 15. Indemnification of Directors and Officers

Section 102 of the Delaware General Corporation Law, or the DGCL, permits a corporation to eliminate the personal liability of its directors to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, subject to certain exceptions. The Registrant's amended and restated certificate of incorporation provides that, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Registrant shall be personally liable to the Registrant or its stockholders for monetary damages for any breach of fiduciary duty as a director. If the DGCL is amended to permit further elimination or limitation of the personal liability of directors, then the liability of a director of the Registrant shall be eliminated or limited to the fullest extent permitted by the DGCL as so amended.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which the Court of Chancery or such other court shall deem proper.

The Registrant has entered into indemnification agreements with all of its directors and officers. In general, these agreements provide that the Registrant will indemnify the director or officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or officer of the Registrant or in connection with their service at the Registrant's request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or officer makes a claim for indemnification and establish certain presumptions that are favorable to the director or officer.

In addition, the Registrant maintains a general liability insurance policy that covers certain liabilities of the Registrant's directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 16. Exhibits

(b) All schedules have been omitted because they are not required, are not applicable or the information is otherwise set forth in the financial statements and related notes thereto.

Exhibit No.	Description
2.1#	Asset Purchase Agreement, dated December 1, 2020, by and among (i) Aterian, Inc. and Truweo, LLC, as Purchaser, (ii) 9830 Macarthur LLC, Reliance Equities Group, LLC and ZN Direct LLC, as Sellers and (iii) Jelena Puzovic, as Founder (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on December 1, 2020)
2.2#	Asset Purchase Agreement, dated February 2, 2021, by and among (i) Aterian, Inc. and Truweo, LLC, as Purchaser, (ii) Healing Solutions, LLC, (iii) Jason R. Hope, and (iv) for the purposes of Section 5.11 and Article VII, Super Transcontinental Holdings LLC (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on February 3, 2021)
2.3#	Asset Purchase Agreement, dated May 5, 2021, by and among (i) the Company and Truweo, LLC, as Purchaser, (ii) Squatty Potty, LLC, and (iii) for the purposes of Section 5.7, Section 5.8, Section 5.11, Section 5.13 and Article VII, Edwards SP Holdings, LLC, Team Lindsey, LLC, SLEKT Investments, LLC, Sachs Capital Fund II, LLC, Sachs Capital-Squatty, LLC and Bevel Acquisition II, LLC. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on May 11, 2021)
2.4#	Stock Purchase Agreement, dated May 5, 2021, by and among (i) the Company and Truweo, LLC, as Purchaser, (ii) Photo Paper Direct Ltd, (iii) Josef Eitan, and (iv) Ran Nir (incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed with the SEC on May 11, 2021)
3.1	Certificate of Correction of Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Aterian, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the SEC on April 30, 2021)
3.2	Amended and Restated Certificate of Incorporation of Aterian, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on April 30, 2021)
3.3	Third Amended and Restated Bylaws of Aterian, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on June 1, 2022).
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1 filed with the SEC on May 24, 2020).
4.2	Form of Registration Rights Agreement, dated as of April 6, 2018, among Aterian, Inc. and the purchasers party thereto (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1 filed with the SEC on May 10, 2019).
4.3	Warrant to Purchase Stock, issued to MidCap Financial Trust on September 4, 2018. (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-1 filed with the SEC on May 10, 2019).
4.4	Form of Warrant, issued to Katalyst Securities LLC and its assigns on September 4, 2018. (incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-1 filed with the SEC on May 10, 2019).
4.5	Form of Warrant, issued to Horizon Technology Finance Corporation on December 31, 2018. (incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-1 filed with the SEC on May 10, 2019).
4.6	Amendment No. 1 to Registration Rights Agreement, dated as of March 2, 2019, among Aterian, Inc. and the investors party thereto (incorporated by reference to Exhibit 4.6 to the Company's Registration Statement on Form S-1 filed with the SEC on May 10, 2019).
4.7	Warrant to Purchase Shares of Common Stock, issued to Third Creek Advisors, LLC on August 18, 2020 (incorporated by reference to Exhibit 4.6 to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 9, 2021).
4.8	Form of Warrant to Purchase Stock, dated December 22, 2022 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the SEC on December 27, 2021)
4.9	Description of Securities of Aterian, Inc. (incorporated by reference to Exhibit 4.9 to the Company's Annual Report on Form 10-K filed with the SEC on March 16, 2023).
10.1	Asset Purchase Agreement, dated as of April 27, 2026, by and between Aterian, Inc. and Trademark Global, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on April 29, 2026).
10.2	Securities Purchase Agreement, dated as of April 27, 2026, by and between Aterian, Inc. and David Lazar (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on April 29, 2026).
10.3	Form of Voting Agreement (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed with the SEC on April 29, 2026).
5.1*	Opinion of Haynes and Boone, LLP.
23.1*	Consent of UHY LLP, independent registered public accounting firm.
23.2*	Consent of Haynes and Boone, LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (contained in the signature page to this registration statement).
107 *	Filing Fee Table.

* Filed herewith

\# Portions of this exhibit have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K

Item 17. Undertakings

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 of 1933;

(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 a 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;

Provided, however, that:

Paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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 of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B (§230.430B of this chapter):

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10 (a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement 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.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Summit, State of New Jersey, on July 20, 2026.

ATERIAN, INC.

By:	*/s/* David Lazar
Name:	David Lazar
Title:	Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below hereby appoints David Lazar as his true and lawful attorney-in-fact, with full power of substitution, and with the authority to execute in the name of each such person, any and all amendments (including without limitation, post-effective amendments) to this registration statement on Form S-3, to sign any and all additional registration statements relating to the same offering of securities as this registration statement that are filed pursuant to Rule 462(b) of the Securities Act of 1933, and to file such registration statements with the Securities and Exchange Commission, together with any exhibits thereto and other documents therewith, necessary or advisable to enable the registrant to comply with the Securities Act of 1933, and any rules, regulations and requirements of the Securities and Exchange Commission in respect thereof, which amendments may make such other changes in the registration statement as the aforesaid attorney-in-fact executing the same deems appropriate.

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

Signature	Title	Date
/s/ David Lazar David Lazar	Chief Executive Officer and Director (Principal Executive Officer)	July 20, 2026
/s/ Joshua Feldman Joshua Feldman	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	July 20, 2026
/s/ David Natan David Natan	Director	July 20, 2026
/s/ Avraham Ben-Tzi Avraham Ben-Tzi	Director	July 20, 2026
/s/ Arturo Rodriguez Arturo Rodriguez	Director	July 20, 2026
/s/ William Kurtz William Kurtz	Director	July 20, 2026

Exhibit 5.1

July 20, 2026

Aterian, Inc.
350 Springfield Avenue Suite #200
Summit, NJ 07901

Ladies and Gentlemen:

We have acted as counsel for Aterian, Inc., a Delaware corporation (the "Company"), in connection with the filing with the Securities and Exchange Commission (the "Commission") on the date hereof, under the Securities Act of 1933, as amended (the "Securities Act"), of its registration statement on Form S-3 (the "Registration Statement") by the Company which registers the resale by the holders thereof of an aggregate of 6,737,500 shares (the "Conversion Shares") of common stock of the Company, par value $0.0001 per share (the "Common Stock") issuable upon the conversion of an aggregate of 875,000 shares of the Company's Series AA Convertible Preferred Stock, par value $0.0001 per share (the "Series AA Preferred Stock").

In rendering the opinion expressed herein, we have examined and relied upon the originals, or copies certified to our satisfaction, of (i) the Amended and Restated Certificate of Incorporation, as amended, and the Third Amended and Restated Bylaws of the Company, as amended, as of the date hereof (collectively, "Company Charter Documents"); (ii) the Registration Statement and all exhibits thereto; (iii) Certificate of Designations of the Series AA Preferred Stock (the "Certificate of Designations"); (iv) a specimen of the Company's Common Stock certificate; (v) a certificate executed by an officer of the Company, dated as of the date hereof; and (vi) such other corporate records of the Company as we have deemed necessary or appropriate for purposes of the opinions hereafter expressed.

As to questions of fact material to the opinions expressed below, we have, without independent verification of their accuracy, relied to the extent we deemed reasonably appropriate upon the representations and warranties of the Company contained in such documents, records, certificates, instruments or representations furnished or made available to us by the Company.

In making the foregoing examinations, we have assumed (i) the genuineness of all signatures, (ii) the authenticity of all documents submitted to us as originals, (iii) the conformity to original documents of all documents submitted to us as certified or photostatic copies, (iv) that all agreements or instruments we have examined are the valid, binding and enforceable obligations of the parties thereto, and (v) that all factual information on which we have relied was accurate and complete.

We have also assumed that (i) the Company will continue to be incorporated and in existence and good standing in its jurisdiction of organization; (ii) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective; (iii) no stop order of the Commission preventing or suspending the use of the prospectus contained in the Registration Statement or any prospectus supplement will have been issued; (iv) a prospectus properly describing the Common Stock offered thereby will have been delivered to the purchaser(s) of the Common Stock as required in accordance with applicable law; (v) all Common Stock will be offered, issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the prospectus and any prospectus supplement; (vi) any definitive purchase, underwriting or similar agreement with respect to any shares of Common Stock offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto and will be an enforceable obligation of the parties thereto; (vii) upon effectiveness of the Registration Statement, there will be sufficient shares of Common Stock authorized under the Company Charter Documents and not otherwise reserved for issuance; and (viii) there will not have occurred any change in law or in the Company Charter Documents of the Company adversely affecting the Common Stock or the rights of the holders thereof.

Based upon the foregoing and subject to the assumptions and qualifications stated herein, we are of the opinion that the Conversion Shares issuable upon conversion of the shares of the Series AA Preferred Stock, when issued in accordance with the terms of the Certificate of Designations, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited exclusively to the General Corporation Law of the State of Delaware (the "DGCL") and applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the DGCL and such provisions of the Delaware Constitution and we have not considered, and express no opinion on, any other laws or the laws of any other jurisdiction.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the heading "Legal Matters" in the prospectus constituting part of such Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Haynes and Boone, LLP

Haynes and Boone, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Aterian, Inc. on Form S-3 of our report dated March 20, 2026, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of Aterian, Inc. and Subsidiaries as of December 31, 2025 and 2024 and for the years ended December 31, 2025 and 2024 appearing in the Annual Report on Form 10-K of Aterian, Inc. for the year ended December 31, 2025.

We also consent to the reference to our Firm under the heading "Experts" in such Registration Statement.

UHY LLP

Melville, NY

July 20, 2026

Calculation of Filing Fee Tables

S-3

Aterian, Inc.

Table 1: Newly Registered and Carry Forward Securities ☐Not Applicable

		Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
Newly Registered Securities													
Fees to be Paid	1	Equity	Common Stock, par value $0.0001 per share	Other	6,737,500	$ 1.26	$ 8,489,250.00	0.0001381	$ 1,172.37				
Fees Previously Paid													
Carry Forward Securities													
Carry Forward Securities													
					Total Offering Amounts:		$ 8,489,250.00		$ 1,172.37				
					Total Fees Previously Paid:				$ 0.00				
					Total Fee Offsets:				$ 0.00				
					Net Fee Due:				$ 1,172.37				

Offering Note

1

Pursuant to Rule 416 under the Securities Act of 1933 (the "Securities Act"), the shares being registered hereunder include such indeterminate number of shares of common stock, par value $0.0001 per share (the "Common Stock"), as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

Represents an aggregate of 6,737,500 shares of Common Stock issuable upon the conversion of an aggregate of 875,000 shares of Series AA Convertible Preferred Stock, par value $0.0001 per share.

Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) under the Securities Act, based on the average of the high and low prices of the Common Stock as reported on the Nasdaq Capital Market on July 16, 2026, which such date is within five business days of the filing of this registration statement, of $1.26 per share.

Table 2: Fee Offset Claims and Sources ☑Not Applicable

		Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
Rules 457(b) and 0-11(a)(2)												
Fee Offset Claims												
Fee Offset Sources												
Rule 457(p)												
Fee Offset Claims												
Fee Offset Sources												

Table 3: Combined Prospectuses ☑Not Applicable

	Security Type	Security Class Title	Amount of Securities	Maximum Aggregate Offering Price of	Form Type	File Number	Initial Effective Date

			Previously Registered	Securities Previously Registered			