

PROSPECTUS



Aquestive Therapeutics, Inc.

230,271 Shares of Common Stock

This prospectus relates to the resale of up to 230,271 shares of Aquestive Therapeutics, Inc. (the “Company,” “we,” “our” or “us”) common stock, par value \$0.001 per share (“Common Stock”), by the selling stockholders listed in this prospectus, their transferees, donees, pledgees, assignees, successors and others who later come to hold any of the selling stockholders’ interests in shares of our Common Stock other than through a public sale (the “Selling Stockholders”). The shares of Common Stock offered for resale pursuant to this prospectus include an aggregate of 230,271 shares of Common Stock (the “Warrant Shares”) issuable upon exercise of common warrants (the “Warrants”) issued to the Selling Stockholders pursuant to a warrant issuance agreement by and between the Company and the Selling Stockholders (the “Warrant Issuance Agreement”), related to the Tranche A Term Loan (as defined below).

The Warrants have an exercise price of \$4.18 per share, subject to adjustment, were exercisable beginning on May 12, 2026 and expire on May 12, 2031. At the option of the holder, the Warrants may also be exercised, in whole or in part, at such time by means of a “cashless exercise”.

We are registering the Warrant Shares on behalf of the Selling Stockholders, to be offered and sold by the Selling Stockholders from time to time. We are not selling any securities under this prospectus. Upon any cash exercise of the Warrants by the Selling Stockholders, we will receive cash proceeds per share equal to the exercise price of the Warrants. If the Warrants are exercised in a cashless exercise, we will not receive any proceeds from the exercise of the Warrants.

The Selling Stockholders may sell the Warrant Shares described in this prospectus in a number of different ways and at varying prices. See Plan of Distribution on page [12](#) of this prospectus for more information about how the Selling Stockholders may sell the Warrant Shares offered pursuant to this prospectus. The Selling Stockholders may be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended (the “Securities Act”).

We will pay the expenses incurred in registering the Warrant Shares, including our legal and accounting fees. See Plan of Distribution on page [12](#) of this prospectus.

Our Common Stock is traded on the Nasdaq Global Market under the symbol “AQST”. On July 8, 2026, the last reported sale price of our Common Stock was \$4.31 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading “Risk Factors” contained in this prospectus and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus as described on page [4](#) of this prospectus.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is July 8, 2026.

TABLE OF CONTENTS

	<u>Page</u>
ABOUT THIS PROSPECTUS	1
SUMMARY	2
RISK FACTORS	4
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	5
DESCRIPTION OF THE PRIVATE PLACEMENT	8
SELLING STOCKHOLDERS	9
USE OF PROCEEDS	11
PLAN OF DISTRIBUTION	12
LEGAL MATTERS	14
EXPERTS	14
WHERE YOU CAN FIND MORE INFORMATION	14
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	15

ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a “shelf” registration process. Under this shelf registration process, the Selling Stockholders may, from time to time, offer and sell the Warrant Shares described in this prospectus in one or more offerings. Information about the Selling Stockholders may change over time.

Each time the Selling Stockholders sell the Warrant Shares using this prospectus, to the extent necessary and required by law, we will provide a prospectus supplement that will contain specific information about the terms of that offering, including the number of Warrant Shares being offered, the manner of distribution, the identity of any underwriters or other counterparties and other specific terms related to the offering. The prospectus supplement may also add, update or change information contained in this prospectus. To the extent that any statement made in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in the prospectus supplement. You should read this prospectus, any applicable prospectus supplement and the information incorporated by reference in the prospectus before making an investment in shares of our Common Stock. See “*Where You Can Find More Information*” for more information.

Neither we nor the Selling Stockholders have authorized any person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus prepared by or on behalf of us or to which we have referred you. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor does this prospectus, any applicable supplement to this prospectus or any related free writing prospectus 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. For investors outside of the United States, neither we nor the Selling Stockholders have done anything that would permit the offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to the offering and distribution of this prospectus outside of the United States.

You should not assume that the information contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document 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 if this prospectus, any applicable prospectus supplement or any related free writing prospectus is delivered, or securities are sold, on a later date. Our business, financial condition, results of operations and prospects may have changed since the date on the front cover of this prospectus.

This prospectus and the information incorporated herein by reference contain summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “*Where You Can Find More Information.*”

SUMMARY

This summary highlights information contained in other parts of this prospectus or incorporated by reference into this prospectus from our filings with the Securities and Exchange Commission (the "SEC"). As it is only a summary, it does not contain all of the information that you should consider before purchasing our securities and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere or incorporated by reference into this prospectus. You should read the entire prospectus, the registration statement of which this prospectus is a part, and the information incorporated by reference herein in their entirety, including the "Risk Factors" and our financial statements and the related notes contained in and incorporated by reference into this prospectus, before purchasing our securities.

Unless the context indicates otherwise, references in this prospectus to "Aquestive," "Company," "we," "us" and "our" refer to Aquestive Therapeutics, Inc. and its consolidated subsidiaries.

Company Overview

We are a pharmaceutical company advancing medicines to bring meaningful improvement to patients' lives through innovative science and delivery technologies. The worldwide leader in delivering trusted, quality medications on oral film, we operate as both a developer of our own proprietary products and a Contract Development and Manufacturing Organization (CDMO) for licensees, with our headquarters in New Jersey and U.S.-based manufacturing facilities in Indiana. We are the exclusive manufacturer of four commercialized products marketed by licensees across six continents using proprietary, best-in-class technologies like PharmFilm®. Aquestive's AdrenaVerse™ platform contains a library of more than 20 epinephrine prodrugs enabling the pursuit of various potential allergy and dermatological indications. We are advancing Anaphylm™ (dibutepinephrine) sublingual film for the treatment of severe allergic reactions, including anaphylaxis, and AQST-108 (epinephrine) topical gel for various potential dermatological conditions, including alopecia areata, atopic dermatitis, rosacea, and psoriasis.

We manufacture licensed products at our facilities and anticipate that our current manufacturing capacity is sufficient for commercial quantities of our licensed products and product candidates currently in development. Our facilities have been inspected by the Food and Drug Administration (FDA), Australian Government Department of Health's Therapeutics Goods Administration (TGA), and Drug Enforcement Agency (DEA), and are subject to inspection by all applicable health agencies, including the Brazilian Health Regulatory Agency (ANVISA) and European Medicines Agency (EMA). Not all collaborative or licensed products of the Company that may be commercially launched in the future will necessarily be manufactured by us.

Corporate Information

Aquestive Therapeutics, Inc. was formed effective on January 1, 2018 via the conversion of MonoSol Rx, LLC to a Delaware corporation and a simultaneous name change. Our production facilities are located in Portage, Indiana, and our corporate headquarters and primary research laboratory facilities are located at 30 Technology Drive S., Warren, New Jersey 07059. Our telephone number there is (908) 941-1900. The address of our website is www.aquestive.com. The information set forth on, or connected to, our website is expressly not incorporated by reference into, and does not constitute a part of, this prospectus.

Implications of Being a Smaller Reporting Company

We are a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"). As a result, we may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our voting and non-voting Common Stock held by non-affiliates is more than \$250 million measured on the last business day of our second fiscal quarter, or our annual revenues are more than \$100 million during the most recently completed fiscal year and our voting and non-voting Common Stock held by non-affiliates is more than \$700 million measured on the last business day of our second fiscal quarter.

The Offering	
Shares of Common Stock offered by the Selling Stockholders	230,271 Warrant Shares.
Use of proceeds	We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of the Warrant Shares covered hereby by the Selling Stockholders, except for the exercise price paid by the Selling Stockholders for the Warrant Shares offered hereby upon any cash exercise of the Warrants.
Terms of this offering	The Selling Stockholders, including their transferees, donees, pledgees, assignees, successors and others who later come to hold any of the Selling Stockholders' interests in the Warrant Shares other than through a public sale, may sell, transfer or otherwise dispose of any or all of the shares of Common Stock offered by this prospectus from time to time as described in the " <i>Plan of Distribution</i> ," including on The Nasdaq Global Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. The shares of Common Stock may be sold at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market price or at negotiated prices.
Nasdaq symbol	Our Common Stock is listed on The Nasdaq Global Market under the symbol "AQST".
Risk Factors	Investing in our securities involves significant risks. Before making a decision whether to invest in our securities, please read the information contained in or incorporated by reference under the heading " <i>Risk Factors</i> " in this prospectus, the documents we have incorporated by reference herein, and under similar headings in other documents filed after the date hereof and incorporated by reference into this prospectus. See " <i>Incorporation of Certain Information by Reference</i> " and " <i>Where You Can Find More Information</i> ".

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to purchase our securities, including the shares of Common Stock offered by this prospectus, you should carefully consider the risks and uncertainties described under “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, our Quarterly Report on Form 10-Q for the period ended March 31, 2026 and any subsequent Quarterly Reports on Form 10-Q and our other filings with the SEC, all of which are incorporated by reference herein. If any of these risks actually occur, our business, financial condition and results of operations could be materially and adversely affected and we may not be able to achieve our goals, the value of our securities could decline and you could lose some or all of your investment. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations. If any of these risks occur, our business, results of operations or financial condition and prospects could be harmed. In that event, the market price of our Common Stock and the value of the Warrants could decline, and you could lose all or part of your investment.

Risks Related to This Offering

We have no control over the timing or volume of sales of the Warrant Shares by the Selling Stockholders, and any such sales could cause our stock price to decline.

The Selling Stockholders may offer and sell some, all, or none of the Warrant Shares registered for resale pursuant to this prospectus at any time and from time to time in their sole discretion. We have no ability to control or predict the timing or volume of any such sales. Sales of substantial amounts of our Common Stock in the public market by the Selling Stockholders, or the perception that such sales might occur, could adversely affect the prevailing market price of our Common Stock. Such sales could also impair our ability to raise additional capital through the sale of equity or equity-related securities in the future at a time and price that we deem appropriate.

We will not receive any proceeds from the sale of the Warrant Shares by the Selling Stockholders.

We are not selling any shares of our Common Stock under this prospectus and will not receive any proceeds from the sale of the Warrant Shares by the Selling Stockholders. Upon any cash exercise of the Warrants by the Selling Stockholders, we will receive cash proceeds per share equal to the exercise price of \$4.18 per share. However, if the Warrants are exercised on a cashless basis, we will not receive any proceeds from such exercise. There can be no assurance that the Selling Stockholders will exercise any or all of the Warrants, or that they will not elect to exercise the Warrants on a cashless basis, in which case we would receive no proceeds.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, the documents that we incorporate by reference herein and certain other communications made by us include forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “believe,” “anticipate,” “plan,” “expect,” “estimate,” “intend,” “may,” “will,” or the negative of those terms, and similar expressions are intended to identify forward-looking statements.

These forward-looking statements include, but are not limited to, statements regarding the advancement and related timing of our product candidate Anaphylm™ (dibutepinephrine) sublingual film through clinical development and approval by the FDA, including our ability to address the concerns raised by the FDA in the Complete Response Letter (CRL) dated January 30, 2026 and Type A meeting with the FDA on March 26, 2026, and for the FDA to approve Anaphylm or whether the FDA may request further information from us, disagree with our protocols, study designs, or findings or otherwise undertake a lengthy review of our resubmission, and challenges regarding the following commercial launch of Anaphylm, if approved by the FDA; the advancement and related timing of potential international regulatory filings and marketing authorization of Anaphylm outside of the U.S.; Anaphylm’s potential to be the first and only oral administration of epinephrine and to be accepted as an alternative to existing standards of care, if approved by the FDA; the expected growth of the U.S. epinephrine market including in value and the opportunity such growth presents to the Company should Anaphylm be approved by the FDA; the advancement, growth and related timing of our AdrenaVerse™ pipeline epinephrine prodrug product candidates, including AQST-108 (epinephrine) topical gel, through clinical development and FDA regulatory approval process, including design and timing of clinical studies including those necessary to support the targeted indication of alopecia areata for AQST-108 or other possible indications; the potential sale or outlicensing of Anaphylm, Libervant or other product candidates; anticipated timelines, milestones, and guidance relating to regulatory submissions, clinical studies, regulatory interactions, and potential approvals, which are subject to change based on regulatory feedback, protocol alignment, data sufficiency, and other factors outside the Company’s control; the commercial opportunity of Libervant, Anaphylm, AQST-108 and our other product candidates, should these product candidates be approved by the FDA; the focus on continuing to manufacture Suboxone®, Emylif®, Sympazan®, Ondif® and other licensed products; the potential benefits our products and product candidates could bring to patients; the achievement of clinical and commercial milestones, product orders and fulfillment; our cash requirements, cash funding and cash burn; short-term and longer term liquidity and the ability to fund our business operations; our growth and future financial and operating results and financial position, including with respect to our 2026 financial outlook; and business strategies, market opportunities, and other statements that are not historical facts.

These forward-looking statements are based on our current expectations and beliefs and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. Such risks and uncertainties include, but are not limited to:

- risks associated with our development work, including any delays or changes to the timing, cost and success of our product development activities and clinical trials and plans, including those relating to Anaphylm, AQST-108, and our other product candidates;
- risk of insufficient capital and cash resources, including insufficient access to available debt and equity financing, including under our “at-the-market” facility and the funding agreement with RTW Investments LP, and revenues from operations, to satisfy all of our short-term and longer-term liquidity and cash requirements to support our growth strategy, and other cash needs, at the times and in the amounts needed, and to fund future clinical development and commercial activities for our product candidates, including Anaphylm, AQST-108 and Libervant should these product candidates be approved by the FDA;
- risks related to our existing indebtedness and potential future obligations under our Credit Agreement, including the risk that, should Anaphylm receive FDA approval, our indebtedness will increase substantially, and there is no assurance that revenues from the commercialization of Anaphylm will be sufficient to service or repay such obligations; and that, if Anaphylm does not receive FDA approval, we will be required to maintain larger cash reserves to fund ongoing operations and will not be able to deploy those funds for other purposes;
- risks that restrictive covenants contained in our Credit Agreement could limit our operational flexibility, including restrict our ability to incur additional indebtedness or make investments, and impair our ability to raise additional capital when needed;

TABLE OF CONTENTS

- risk of the impact of our obligations under the Company's purchase and sale agreement with funds managed by RTW Investments LP and the royalty rights agreements with third parties, each of which agreements requires the Company to make payments to each counterparty thereof, respectively, of a portion of our revenues, on our ability to contribute to the funding of our operations and the payment of interest on our debt;
- risk of delays in advancement of the regulatory approval process through the FDA of our product candidates, including the filing of the respective NDAs, for Anaphylm, AQST-108, Libervant and other product candidates, or failure to receive FDA approval at all for any of these product candidates;
- risk of FDA inspections of manufacturing and clinical study sites for any of our product candidates, including Anaphylm;
- risk of government shutdowns or actions to reduce government workforces on the ability of the FDA to act on the approval of our product candidates, including Anaphylm and Libervant;
- risk of the Company's ability to generate sufficient clinical and other human factor data, including with respect to our submission of pharmacokinetics and pharmacodynamics (PK/PD) comparability data for FDA approval of Anaphylm;
- risks associated with our ability to address the FDA's comments on and identified deficiencies in our NDA for Anaphylm, including the concerns raised by the FDA in the CRL and Type A Meeting;
- risks associated with the success of any competing products, including generics;
- risks and uncertainties inherent in commercializing a new product (including technology risks, financial risks, market risks and implementation risks and regulatory limitations);
- risk of development of a sales and marketing capability for commercialization of our product candidates, including Anaphylm, if approved by the FDA;
- risks associated with the potential impact on the value of the Company of the sale or outlicensing of our product and product candidates, including Libervant and Anaphylm and other product candidates;
- risk that our manufacturing capabilities will be insufficient to support demand of our product candidates in the U.S. and abroad, including Anaphylm, if such product candidates should be approved by the FDA and other regulatory authorities, and our licensed products in the U.S. and abroad;
- risk of eroding market share for Suboxone® as a sunset product, which accounts for a substantial part of our current operating revenue;
- risk of default of our debt instruments;
- risks related to the outsourcing of certain sales, marketing and other operational and staff functions to third parties;
- risk of the rate and degree of market acceptance in the U.S. and abroad of Anaphylm, AQST-108, Libervant and our other product candidates, should these product candidates be approved by the FDA and other regulatory authorities, and for our licensed products in the U.S. and abroad;
- risk associated with the size and growth of our product markets; risk associated with our compliance with all FDA and other governmental and customer requirements for our manufacturing facilities;
- risks associated with intellectual property rights and infringement claims relating to our products;
- risk that our patent applications for our product candidates, including for Anaphylm, will not be timely issued, or issued at all, by the United States Patent and Trademark Office (PTO) or, if issued, will be sufficient to provide long-term commercial success of these product candidates; risk of unexpected patent developments;
- risk of legislation and regulatory actions and changes in laws or regulations affecting our business, including relating to our products and product candidates and product pricing, reimbursement or access therefor; risk of loss of significant customers;

TABLE OF CONTENTS

- risks related to claims and legal proceedings against us including patent infringement, securities, business torts, investigative, product safety or efficacy and antitrust litigation matters;
- risk of product recalls and withdrawals;
- risks related to any disruptions in our information technology networks and systems, including the impact of cybersecurity attacks;
- risk of increased cybersecurity attacks and data accessibility disruptions due to remote working arrangements; risk of adverse developments affecting the financial services industry;
- risks related to inflation and changing interest rates; risks related to the impact of pandemic diseases on our business;
- risks and uncertainties related to general economic, political (including the Ukraine, Israel and Iran wars and other acts of war and terrorism), business, industry, regulatory, financial and market conditions and other unusual items; risks related to uncertainty about presidential administration initiatives and their impact on our business, including imposition of government tariffs and other trade restrictions; and
- other uncertainties affecting us described in the “Risk Factors” section and in other sections included in our Annual Report on Form 10-K, in our Quarterly Reports on Form 10-Q, and in our Current Reports on Form 8-K and our other filings with the SEC.

These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from those expressed or implied by these statements. These factors include the matters discussed and referenced in the “Risk Factors” section and in other sections included in our Annual Report on Form 10-K, and in our Quarterly Reports on Form 10-Q. Given those uncertainties, you should not place undue reliance on these forward-looking statements, which speak only as of the date made. All subsequent forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by this cautionary statement. We assume no obligation to update forward-looking statements or outlook or guidance after the date of this prospectus whether as a result of new information, future events or otherwise, except as may be required by applicable law. Readers should not rely on the forward-looking statements included in this prospectus or the documents that we incorporate by reference herein as representing our views as of any date after the date of the filing of this prospectus.

DESCRIPTION OF THE PRIVATE PLACEMENT

As previously disclosed in our Current Report on Form 8-K filed with the SEC on May 13, 2026, on May 12, 2026 (the “Effective Date”), we entered into a five-year term loan facility of up to \$150.0 million pursuant to a credit agreement and guaranty (the “Credit Agreement”) with Oaktree Fund Administration, LLC, a Delaware limited liability company, as administrative agent, and certain funds managed by Oaktree Capital Management, L.P. party thereto, which included a term loan in an aggregate principal amount of \$55.0 million that was funded on the Effective Date (the “Tranche A Term Loan”), a term loan in an aggregate principal amount of \$20.0 million available subject to certain terms and conditions (the “Tranche B Term Loan”), a term loan in an aggregate principal amount of \$25.0 million available subject to certain terms and conditions (the “Tranche C Term Loan”), and a term loan advance available upon the mutual consent of the Lenders and subject to certain terms and conditions in an aggregate principal amount of up to \$50.0 million (the “Tranche D Term Loan”). In connection with entering into the Credit Agreement, we entered into the Warrant Issuance Agreement with the Selling Stockholders, pursuant to which we agreed to issue Warrants to purchase Warrant Shares in amounts equal to (i) (x) 1.75% of the aggregate principal amount of the Tranche A Term Loan (y) divided by the volume weighted average price for the 30 trading days prior to the Effective Date (the “Tranche A VWAP”) and (ii) for the Tranche B and Tranche C draw-downs, (x) 1.75% of the aggregate principal amount of the drawn-down tranche (y) divided by the lower of (1) the Tranche A VWAP and (2) the VWAP for the 30 days prior to the funding of such tranche (the “Subsequent Tranche VWAP”). The exercise price of the Warrants is the Tranche A VWAP of \$4.18 per share for the Tranche A Warrants and the lower of (1) the Tranche A VWAP and (2) the Subsequent Tranche VWAP for the subsequent tranche draw-downs, in each case subject to adjustment for stock splits, reverse stock splits, stock dividends and similar transactions.

The Warrants have a term of five years from their initial issuance. The Warrants are subject to a beneficial ownership limitation of 4.99%, or 9.99% at the election of the holder and effective 61 days after notice is provided to the Company (the “Beneficial Ownership Limitation”), which such limitation restricts a Selling Stockholder from exercising that portion of the Warrants that would result in such Selling Stockholder and its affiliates and any person acting as a group together with such Selling Stockholder and its affiliates owning, after exercise, a number of shares of Common Stock in excess of the Beneficial Ownership Limitation. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of a Warrant. As to any fraction of a share which would otherwise be issued upon exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price or round up to the next whole share.

Pursuant to the Warrant Issuance Agreement, we are required to file a resale registration statement (the “Resale Registration Statement”) under the Securities Act to register the resale of the Warrant Shares within 45 days of each Warrant issuance (each, a “Filing Deadline”) and to use commercially reasonable efforts to cause such Resale Registration Statement to become effective as promptly as practical following the applicable Filing Deadline and to maintain the effectiveness of such Resale Registration Statement at all times until all Warrant Shares have been sold or the applicable Warrant has expired. This prospectus covers the resale of the Warrant Shares related to the Tranche A Term Loan.

SELLING STOCKHOLDERS

This prospectus relates to the sale from time to time by the Selling Stockholders of up to 230,271 Warrant Shares received pursuant to the Warrant Issuance Agreement entered into in connection with the Credit Agreement, as described under “Description of the Private Placement,” above. When we refer to the “Selling Stockholders” in this prospectus, we mean the entities listed in the table below, and their respective transferees, donees, pledgees, assignees, successors and others who later come to hold any of the Selling Stockholders’ interests in shares of our Common Stock other than through a public sale.

The Selling Stockholders may sell some, all or none of their Warrant Shares. We do not know how long the Selling Stockholders will hold the Warrants, whether the Selling Stockholders will exercise the Warrants, and upon exercise, how long the Selling Stockholders will hold the Warrant Shares before selling them, and we currently have no agreements, arrangements or understandings with the Selling Stockholders regarding the sale of any of the Warrant Shares.

The following table presents information regarding the Selling Stockholders and the Warrant Shares that they may offer and sell from time to time under this prospectus. The table is prepared based on information supplied to us by the Selling Stockholders, and reflects their holdings as of June 18, 2026, unless otherwise noted in the footnotes to the table. Beneficial ownership is determined in accordance with the rules of the SEC, and thus represents voting or investment power with respect to our securities. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days after the date of this table, including pursuant to exercise of the Warrants, to our knowledge and subject to applicable community property rules, the persons and entities named in the table have sole voting and sole investment power with respect to all equity interests beneficially owned. The percentage of shares beneficially owned before and after the offering is based on 125,466,988 shares of our Common Stock actually outstanding as of June 18, 2026.

Each of the Selling Stockholders is an affiliate of a broker-dealer, however, the Selling Stockholders have each represented to us that it acquired all of the securities registered by the registration statement of which this prospectus is a part in the ordinary course of business, and, at the time of acquisition, had no agreements or understandings, directly or indirectly, with any person to distribute such shares of Common Stock. Other than as described in “Description of the Private Placement,” above, the Selling Stockholders and their affiliates have not held a position or office, or had any material relationship, with us within the last three years.

Name of Selling Stockholder ⁽²⁾	Shares of Common Stock beneficially owned prior to the offering		Shares of Common Stock to be offered	Shares of Common Stock beneficially owned after the offering ⁽¹⁾	
	Number	Percentage		Number	Percentage
Oaktree-TCDRS Strategic Credit, LLC	7,872	*	7,873	0	—
Oaktree-Forrest Multi-Strategy, LLC	3,905	*	3,906	0	—
Oaktree-TBMR Strategic Credit Fund C, LLC	2,024	*	2,025	0	—
Oaktree-TBMR Strategic Credit Fund F, LLC	3,269	*	3,270	0	—
Oaktree-TBMR Strategic Credit Fund G, LLC	5,270	*	5,271	0	—
Oaktree-TSE 16 Strategic Credit, LLC	7,301	*	7,302	0	—
INPRS Strategic Credit Holdings, LLC	5,388	*	5,389	0	—
Oaktree Specialty Lending Corporation	26,526	*	26,527	0	—
Oaktree Direct Lending Fund Delaware Holdings Non-EURRC, L.P.	4,584	*	4,585	0	—
Oaktree Direct Lending Fund VCOC Delaware Holdings Non-EURRC, L.P.	1,842	*	1,843	0	—
Oaktree Direct Lending Fund Unlevered Delaware Holdings Non-EURRC, L.P.	3,543	*	3,544	0	—
Oaktree Blue Credit 1 Investment Fund, L.P.	10,972	*	10,973	0	—
Oaktree Multi-Strategy Credit Archway Evergreen Fund, L.P.	2,136	*	2,137	0	—
Oaktree LSL Fund Delaware Holdings Non-EURRC, L.P.	32,676	*	32,677	0	—
Oaktree Jalapeno Investment Fund, L.P.	112,948	*	112,949	0	—

* Less than 1%

(1) Assumes all Warrant Shares offered by the Selling Stockholders hereby are sold and that the Selling Stockholders buy no additional shares of Common Stock prior to the completion of this offering.

TABLE OF CONTENTS

- (2) The sole manager of each of Oaktree-TCDRS Strategic Credit, LLC, Oaktree-Forrest Multi-Strategy, LLC, Oaktree-TBMR Strategic Credit Fund C, LLC, Oaktree-TBMR Strategic Credit Fund F, LLC, Oaktree-TBMR Strategic Credit Fund G, LLC, Oaktree-TSE 16 Strategic Credit, LLC, and INPRS Strategic Credit Holdings, LLC is Oaktree Capital Management, L.P.
- The sole general partner of Oaktree Direct Lending Fund VCOC Delaware Holdings Non-EURRC, L.P. is Oaktree Direct Lending Fund VCOC (Parallel), L.P. The sole general partner of each of Oaktree Direct Lending Fund VCOC (Parallel), L.P., Oaktree Direct Lending Fund Delaware Holdings Non-EURRC, L.P., and Oaktree Direct Lending Fund Unlevered Delaware Holdings Non-EURRC, L.P. is Oaktree Direct Lending Fund GP, L.P. The sole general partner of Oaktree Direct Lending Fund GP, L.P. is Oaktree Direct Lending Fund GP Ltd. The sole director of Oaktree Direct Lending Fund GP Ltd. is Oaktree Capital Management, L.P.
- The sole general partner of Oaktree LSL Fund Delaware Holdings Non-EURRC, L.P. is Oaktree Life Sciences Lending Fund GP, L.P. The sole general partner of Oaktree Life Sciences Lending Fund GP, L.P. is Oaktree Life Sciences Lending Fund GP Ltd. The sole director of Oaktree Life Sciences Lending Fund GP Ltd. is Oaktree Capital Management, L.P.
- The sole general partner of Oaktree Capital Management, L.P. is Oaktree Capital Management GP, LLC.
- The sole investment advisor of Oaktree Specialty Lending Corporation is Oaktree Fund Advisors, LLC. The sole managing member of Oaktree Fund Advisors, LLC is Oaktree Capital II, L.P.
- The sole general partner of Oaktree Blue Credit 1 Investment Fund, L.P. is Oaktree Blue Credit 1 Investment Fund GP, L.P. The sole general partner of Oaktree Multi-Strategy Credit Archway Evergreen Fund, L.P. is Oaktree Multi-Strategy Credit Archway Evergreen Fund GP, L.P. The sole general partner of Oaktree Jalapeno Investment Fund, L.P. is Oaktree Jalapeno Investment Fund GP, L.P. The sole general partner of each of Oaktree Blue Credit 1 Investment Fund GP, L.P., Oaktree Multi-Strategy Credit Archway Evergreen Fund GP, L.P., and Oaktree Jalapeno Investment Fund GP, L.P. is Oaktree Fund GP IIA, LLC. The sole managing member of Oaktree Fund GP IIA, LLC is Oaktree Fund GP II, L.P. The sole general partner of Oaktree Fund GP II, L.P. is Oaktree Capital II, L.P.
- The sole general partner of Oaktree Capital II, L.P. is Oaktree Capital II GP, LLC.
- The sole managing member of each of Oaktree Capital Management GP, LLC and Oaktree Capital II GP, LLC is Oaktree Capital Holdings, LLC. Oaktree Capital Holdings, LLC is governed and controlled by its fourteen-member board of directors.
- Each of the foregoing general partners, managing members, directors, and investment advisors disclaims beneficial ownership of the securities. The address of each of the foregoing is 555 S. Flower St., 35th Floor, Los Angeles, CA 90071.

USE OF PROCEEDS

The Warrant Shares to be offered and sold using this prospectus will be offered and sold by the Selling Stockholders named in this prospectus. Accordingly, we will not receive any proceeds from the sale of any Warrant Shares in this offering, except for the exercise price paid by the Selling Stockholders for the Warrant Shares offered hereby upon the exercise of the Warrants. We will pay all of the fees and expenses incurred by us in connection with this registration.

PLAN OF DISTRIBUTION

The Selling Stockholders and any of their transferees, donees, pledgees, assignees, successors and others who later come to hold any of the Selling Stockholders' interests in shares of our Common Stock other than through a public sale may, from time to time, sell any or all of the Warrant Shares covered hereby on The Nasdaq Global Market or any other stock exchange, market or trading facility on which the Warrant Shares are traded or in private transactions. These sales may be at fixed or negotiated prices, at market prices prevailing at the time of sale, or at prices related to prevailing market price. The Selling Stockholders may use any one or more of the following methods when selling the Warrant Shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the Warrant Shares 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;
- distributions of the Warrant Shares by a Selling Stockholder to its partners, members, stockholders, equityholders or other affiliates, including distributions made in-kind;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of the Warrant Shares at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell the Warrant Shares under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of the Warrant Shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121. If the Warrant Shares are sold through broker-dealers, the Selling Stockholders will be responsible for any applicable fees, discounts or commissions or agent's commissions.

In connection with the sale of the Warrant Shares or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the Warrant Shares in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these Warrant Shares to close out their short positions, or loan or pledge the Warrant Shares to broker-dealers that in turn may sell these Warrant Shares. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of Warrant Shares offered by this prospectus, which Warrant Shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholders and any broker-dealers or agents that are involved in selling the Warrant Shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the Warrant Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The Selling Stockholders have informed the Company that they do not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the Warrant Shares.

TABLE OF CONTENTS

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the Warrant Shares. The Company has agreed to provide customary indemnification to the Selling Stockholders under the Securities Act.

We have agreed to keep this prospectus effective until all Warrant Shares have been sold pursuant to this prospectus or Rule 144 under the Securities Act, but not more than five years from the date of issuance of the Warrants. The Warrant Shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the Warrant Shares covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the Warrant Shares may not simultaneously engage in market making activities with respect to the Common Stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the Common Stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need for Selling Stockholders who are “underwriters” within the meaning of Section 2(a)(11) of the Securities Act to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

Our Common Stock is quoted on The Nasdaq Global Market under the symbol “AQST”.

LEGAL MATTERS

Dechert LLP will pass upon the validity of the securities being offered by this prospectus.

EXPERTS

The financial statements of Aquestive Therapeutics, Inc. as of December 31, 2025 and 2024, and for each of the years in the two-year period ended December 31, 2025, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, and upon the authority of said firm 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 being offered by this prospectus. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the securities offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to herein are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

We file electronically with the SEC annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and other information and amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Exchange Act. The SEC maintains an Internet site (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Copies of these reports, proxy and information statements and other information may be obtained by electronic request at the following e-mail address: publicinfo@sec.gov.

We make available, free of charge and through our Internet web site at www.aquestive.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to any such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Copies of our Code of Business Conduct and Ethics and our Corporate Governance Guidelines may be accessed free of charge by visiting our website at www.aquestive.com under “Investors” at “Corporate Governance: Governance Documents” or by requesting a copy via an e-mail addressed to investorrelations@aquestive.com or by written request addressed to our Corporate Secretary at our principal executive offices. To the extent required by applicable law and regulation, we intend to post on our website any amendment to, or waiver under, a provision of the Code of Business Conduct and Ethics that applies to our executive officers and directors within the time period required. The information set forth on, or connected to, our website is expressly not incorporated by reference into, and does not constitute a part of, this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The SEC file number for the documents incorporated by reference in this prospectus is 001-38599. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this document:

- our Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on [March 4, 2026](#);
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2026, filed with the SEC on [May 13, 2026](#);
- our Definitive Proxy Statement on Schedule 14A, filed with the SEC on [April 24, 2026](#), to the extent incorporated by reference in Part III of the Form 10-K;
- our Current Reports on Form 8-K filed with the SEC on [January 9, 2026](#), [March 4, 2026](#), [March 20, 2026](#), [May 13, 2026](#) and [June 10, 2026](#), to the extent the information in such reports is filed and not furnished; and
- the description of our Common Stock contained in our Registration Statement on Form 8-A, filed with the SEC on [July 20, 2018](#), including any amendments or reports filed for the purposes of updating this description.

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to effectiveness of the registration statement, or (ii) after the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. You should direct any requests for documents to Aquestive Therapeutics, Inc., Attn: Corporate Secretary, 30 Technology Drive S., Warren, NJ 07059; telephone: (908) 941-1900.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.



230,271 Shares of Common Stock

PROSPECTUS

July 8, 2026
