

Prospectus



8,077,043 SHARES OF COMMON STOCK

This prospectus relates to the resale from time to time of up to 8,077,043 shares of common stock, par value \$0.001 per share, of AquaBounty Technologies, Inc. (“AQB,” “AquaBounty” or the “Company”) by the selling stockholders identified in this prospectus (the “Selling Stockholders”). The shares of common stock offered by this prospectus consist of 8,077,043 shares that were issued on October 23, 2026 (the “Conversion Date”) upon conversion of all outstanding Series A Convertible Preferred Stock (the “Series A Preferred Stock”) and Series B Convertible Preferred Stock (the “Series B Preferred Stock” and, together with the Series A Preferred Stock, the “Preferred Stock”), including shares issued in respect of dividends accrued and accumulated through the earlier of the Conversion Date and October 15, 2026, under the Conversion Agreements (as defined below).

The Selling Stockholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers, or agents. The Selling Stockholders may offer their shares at prevailing market prices or privately negotiated prices. We provide more information about how the Selling Stockholders may sell their shares of common stock in the section entitled “Plan of Distribution” on page 20 of this prospectus.

We are registering the shares of common stock to satisfy certain registration rights we granted to the Selling Stockholders. We will not receive any of the proceeds from the sale of our common stock by the Selling Stockholders. We will bear all costs, expenses and fees in connection with the registration of these shares of our common stock, including with regard to compliance with state securities or “blue sky” laws. The Selling Stockholders will bear all commissions and discounts, if any, attributable to their sale of shares of our common stock.

We are a “smaller reporting company” for purposes of federal securities laws and are subject to reduced public company reporting requirements. Accordingly, the information in this prospectus may not be comparable to information provided by companies that are not smaller reporting companies.

The shares of common stock offered hereby were issued upon conversion of the Preferred Stock pursuant to the Conversion Agreements. The conversion occurred automatically on October 23, 2026, the date on which the registration statement of which this prospectus forms a part was declared effective by the Securities and Exchange Commission.

AquaBounty’s common stock, \$0.001 par value per share, is listed on the Nasdaq Capital Market (“Nasdaq”) under the symbol “AQB.” On October 22, 2026, the last reported sale price of our common stock on Nasdaq was \$1.02 per share.

Investing in our securities involves a high degree of risk. See the section entitled “Risk Factors” beginning on page 8 of this prospectus and in the documents incorporated by reference into this prospectus for a discussion of risks that should be considered in connection with an investment in our securities.

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 October 23, 2026.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission (the “SEC”). Under this registration statement, the Selling Stockholders identified in this prospectus may, from time to time, sell the shares of our common stock described in this prospectus in one or more offerings. To the extent required, we may provide a prospectus supplement containing specific information about a particular offering by a Selling Stockholder, including the number of shares of common stock being offered, the offering price and the plan of distribution. You should read both this prospectus and any prospectus supplement together with any additional information described below under the heading “Where You Can Find More Information.”

A prospectus supplement may also add, update or change information included in this prospectus. Any statement contained in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in such prospectus supplement modifies or supersedes such statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus.

You should assume that the information in this prospectus is accurate as of the date of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

You should rely only on the information contained in or incorporated by reference in this prospectus or any applicable prospectus supplement. We have not authorized anyone to provide you with different or additional information. If anyone provides you with different or inconsistent information, you should not rely on it. The Selling Stockholders are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

Our principal executive office is located at 233 Ayer Road, Suite 4, Harvard, Massachusetts 01451 (telephone number: (978) 648-6000).

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates by reference certain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical fact but instead represent only management’s current beliefs regarding future events. By their nature, forward-looking statements are subject to risks, uncertainties, assumptions, and other important factors that may cause actual results, performance or achievements to differ materially from those expressed in or implied by such forward-looking statements. We caution you not to place undue reliance on these forward-looking statements, which speak only as of the date they were made. We do not undertake any obligation to update or revise these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events or the non-occurrence of anticipated events, whether as a result of new information, future developments, or otherwise, except as required by law. Forward-looking statements include, without limitation, statements concerning future plans, objectives, goals, projections, strategies, events, or performance, and underlying assumptions and other statements related thereto. Statements preceded by, followed by or that otherwise include the words “anticipates,” “appears,” “are likely,” “believes,” “estimates,” “expects,” “foresees,” “intends,” “plans,” “projects,” and similar expressions or future or conditional verbs such as “would,” “should,” “could,” “may,” or “will” are intended to identify forward-looking statements. As set forth more fully under “Part I, Item 1A. Risk Factors” in the Company’s most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, each of which is incorporated by reference herein, important factors that could cause actual results, performance, or achievements to differ materially from those expressed in or implied by forward-looking statements include, without limitation, the following:

- Our history of net losses and the likelihood of future net losses;
- Our ability to continue as a going concern;
- Our ability to raise additional funds, including from the sale of non-current assets, in sufficient amounts on a timely basis, on acceptable terms, or at all;
- Our ability to realize value from the remaining Ohio Farm Project (as defined herein) assets, including through a possible sale or other disposition;
- Risks related to potential strategic acquisitions, dispositions, mergers, joint ventures, and other

- strategic transactions;
- Security breaches, cyber-attacks, and other disruptions could compromise our information, expose us to fraud or liability, or interrupt our operations;
 - Any further write-downs of the value of our assets;
 - Business, political, or economic disruptions or global health concerns;
 - Adverse developments affecting the financial services industry;
 - Our ability to use net operating losses and other tax attributes, which may be subject to certain limitations;
 - Volatility in the price of our shares of common stock;
 - Our ability to maintain our listing on the Nasdaq Stock Market LLC (“Nasdaq”);
 - JobsOhio’s demand for repayment of the \$1.0 million economic development grant and any related collection action or proceeding;
 - Our ability to satisfy Nasdaq’s market value of listed securities requirements, including the MVLS Rule (as defined herein) if it becomes effective;
 - An active trading market for our common stock may not be sustained;
 - Our status as a “smaller reporting company” and a “non-accelerated filer” may cause our shares of common stock to be less attractive to investors;
 - Any issuance of preferred stock with terms that could dilute the voting power or reduce the value of our common stock;
 - Provisions in our corporate documents and Delaware law could have the effect of delaying, deferring, or preventing a change in control of us;
 - Our expectation of not paying cash dividends in the foreseeable future;
 - The composition of our Board of Directors may change from time to time under our governing documents, including through the filling of vacancies, which may result in a change in the Company’s strategic plan; and
 - Other risks and uncertainties reported from time-to-time in AquaBounty’s filings with the SEC, including Part I Item 1A “Risk Factors” of AquaBounty’s Annual Report on Form 10-K for the year ended December 31, 2025.

We also direct readers to the other risks and uncertainties discussed in other documents we file with the SEC.

The forward-looking statements made or incorporated by reference in this prospectus relate only to events as of the date on which the statements are made. We do not undertake any obligation to publicly update or review any forward-looking statement except as required by law, whether as a result of new information, future developments or otherwise.

If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, our actual results may vary materially from what we may have expressed or implied by these forward-looking statements. We caution that you should not place undue reliance on any of our forward-looking statements. You should specifically consider the factors identified in this prospectus that could cause actual results to differ before making an investment decision to purchase our securities. Furthermore, new risks and uncertainties arise from time to time, and it is impossible for us to predict those events or how they may affect us.

This summary highlights selected information contained in more detail elsewhere in this prospectus and in documents incorporated by reference in this prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. For a more complete understanding of the Company, we encourage you to read and consider the more detailed information included or incorporated by reference in this prospectus, including the sections titled “Risk Factors,” “Cautionary Statement Regarding Forward-Looking Statements,” and our consolidated financial statements and the accompanying notes thereto incorporated by reference in this prospectus.

Our Business

AquaBounty was incorporated in December 1991 in the State of Delaware for the purpose of conducting research and development of the commercial viability of a group of proteins commonly known as antifreeze proteins. In 1996, we obtained the exclusive licensing rights for a gene construct (transgene) used to create a breed of farm-raised Atlantic salmon that exhibits growth rates that are substantially faster than conventional salmon. The Company historically pursued a growth strategy that included the construction of large-scale recirculating aquaculture system farms for producing its genetically engineered Atlantic salmon (“GE Atlantic salmon”). The Company commenced construction of a 10,000 metric ton farm in Pioneer, Ohio (“Ohio Farm Project”), but paused the construction in June 2023, as the cost estimate to complete the farm continued to substantially increase due to inflation and other factors. Further, these cost increases impaired the Company’s ability to pursue municipal bond financing, which was a necessary component of its funding strategy. The Company subsequently engaged an investment bank to pursue a range of funding and strategic alternatives and to assist management in the prioritization of the Company’s core assets. These efforts resulted in the sale of the Company’s grow-out farm in Indiana in July 2024, recurring sales throughout the remainder of 2024 and the first nine months of 2025 of selected equipment originally intended for the Ohio Farm Project (“Ohio Equipment Assets”), and the sale of the Company’s Canadian subsidiary, including the broodstock farms owned by the Canadian subsidiary in Prince Edward Island, Canada and its intellectual property for GE Atlantic salmon, along with trademarks and patents in March 2025. After completion of these transactions, the Company’s primary remaining asset is its investment in the Ohio Farm Project, consisting of the remaining Ohio Equipment Assets and the land and construction in process. As part of its strategic review of the Ohio Farm Project, the Company has considered potential power generation, energy development, digital infrastructure, an outright sale, joint development, a long-term lease, and other infrastructure-related opportunities. These opportunities may include an outright sale of the property, joint development arrangements, long-term leasing opportunities, or other structures that could unlock the value of the site’s infrastructure assets. The Company will also evaluate opportunities to participate more directly in infrastructure or energy development, where doing so could enhance long-term shareholder value. The Company continues to work with an investment bank to identify the optimal path forward for realizing the value of this asset.

As of October 23, 2026, the Company’s total headcount was 3, all of whom have corporate roles. For more information about our business, please see our most recent Annual Report on Form 10-K, as supplemented and updated by subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K that we have filed or will file with the SEC, and in other documents which are incorporated by reference into this prospectus.

AquaBounty’s common stock is traded on the Nasdaq Capital Market under the symbol “AQB.”

Our executive offices are located at 233 Ayer Road, Suite 4, Harvard, Massachusetts 01451. Our telephone number is (978) 648-6000. Our website address is <https://aquabounty.com>. The information on our website is not part of this prospectus and is not incorporated into this prospectus or any accompanying prospectus supplement by reference.

Private Placements

Series A Preferred Stock Private Placement

On April 7, 2026, we entered into a securities purchase agreement with certain investors, pursuant to which we issued an aggregate of 263,753 shares of Series A Convertible Preferred Stock, par value \$0.01 per share. Of these 263,753 shares, 236,367 shares were issued in exchange for an aggregate of \$4.0 million of principal and \$316

thousand of accrued and unpaid interest on the Company's outstanding senior notes, and 27,386 shares were sold for aggregate gross proceeds of \$500,000. The senior notes were issued in an October 28, 2025 private placement for which Univest Securities, LLC served as placement agent and received a placement agent fee equal to 7% of the gross proceeds plus reimbursement of up to \$125,000 of expenses. Univest Securities, LLC served as placement agent for the \$500,000 cash portion of the Series A offering and received a placement agent fee equal to 7% of the gross cash proceeds; no placement agent fee was paid on the note exchange. Univest Securities, LLC, which had purchased senior notes as an investor, received its shares of Series A Preferred Stock in the note exchange and not as placement agent compensation. The shares were issued and sold at a Liquidation Value of \$18.2580 per share. The terms of the Series A Preferred Stock provided for cumulative dividends at a rate of 18.0% per annum and an initial conversion price of \$0.9129 per share. On October 7, 2026, we entered into a separate Conversion Agreement with each holder of the Series A Preferred Stock, pursuant to which all outstanding Series A Preferred Stock converted automatically on October 23, 2026 into 5,771,929 shares of common stock, including shares issued in respect of dividends accrued and accumulated through the earlier of the Conversion Date and October 15, 2026, and the holders waived any dividends accruing after that date. See "Conversion Agreements" below.

Series B Preferred Stock Private Placement

On June 25, 2026, we entered into a securities purchase agreement with certain investors, pursuant to which we issued and sold an aggregate of 109,223 shares of Series B Convertible Preferred Stock, par value \$0.01 per share, at a Liquidation Value of \$20.60 per share, for aggregate gross proceeds of approximately \$2,250,000. Univest Securities, LLC served as placement agent for the offering and received a placement agent fee equal to 7% of the gross proceeds. The terms of the Series B Preferred Stock provided for cumulative dividends at a rate of 18.0% per annum and an initial conversion price of \$1.03 per share. On October 7, 2026, we entered into a separate Conversion Agreement with each holder of the Series B Preferred Stock, pursuant to which all outstanding Series B Preferred Stock converted automatically on October 23, 2026 into 2,305,114 shares of common stock, including shares issued in respect of dividends accrued and accumulated through the earlier of the Conversion Date and October 15, 2026, and the holders waived any dividends accruing after that date. See "Conversion Agreements" below.

Conversion Agreements

On October 7, 2026, we entered into a separate conversion agreement with each of the Selling Stockholders (each, a "Conversion Agreement" and, collectively, the "Conversion Agreements"), pursuant to which all of the Preferred Stock held by each Selling Stockholder, together with all accrued and accumulated dividends thereon through the earlier of the Conversion Date and October 15, 2026, automatically converted into shares of common stock on October 23, 2026, the date on which the registration statement of which this prospectus forms a part was declared effective by the SEC (the "Conversion Date"). Only dividends accrued and accumulated through the earlier of the Conversion Date and October 15, 2026 were included in the conversion, and each Selling Stockholder waived any dividends accruing after that date. Pursuant to the Conversion Agreements, we agreed to file a registration statement on Form S-3 to register under the Securities Act of 1933, as amended (the "Securities Act"), the resale of the shares of common stock issued upon conversion of the Preferred Stock.

Under the Conversion Agreements, we agreed to use our reasonable best efforts to cause the registration statement to become effective and to remain continuously effective until the earliest of (i) such time as all of the shares covered by the registration statement have been sold pursuant to the registration statement, (ii) the date on which all of the shares may be sold without restriction pursuant to Rule 144 under the Securities Act, without volume or manner-of-sale limitations and without the requirement for us to be in compliance with the current public information requirement under Rule 144, or (iii) the second anniversary of the Conversion Date. Notwithstanding the foregoing, we are entitled from time to time to delay the filing of, or suspend the use of, the registration statement if our Board of Directors determines in good faith that the filing or continued use of the registration statement would require us to make an adverse disclosure of material non-public information, provided that no such delay or suspension may continue for more than sixty (60) consecutive days.

Each Conversion Agreement contains customary mutual indemnification provisions. We have agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act. Each Selling Stockholder has agreed to indemnify us against losses arising out of information furnished in writing by such Selling Stockholder expressly for use in the registration statement. The foregoing description is a summary only and is qualified in its entirety by the full text of the forms of Conversion Agreement, copies of which are filed as Exhibits 10.1 and 10.2 to the registration statement of which this prospectus forms a

part.).

Resale Shares

This prospectus covers the resale by the Selling Stockholders of up to 8,077,043 shares of our common stock, including (i) up to 5,771,929 shares of common stock issued upon conversion of shares of Series A Preferred Stock issued in the Series A Preferred Stock private placement, and (ii) up to 2,305,114 shares of common stock issued upon conversion of shares of Series B Preferred Stock issued in the Series B Preferred Stock private placement, in each case including shares issued in respect of dividends accrued and accumulated on the Preferred Stock through the earlier of the Conversion Date and October 15, 2026. All of those shares were issued on October 23, 2026, the Conversion Date.

THE OFFERING

Securities offered by the Selling Stockholders:	Up to 8,077,043 shares of our common stock, par value \$0.001 per share, issued on October 23, 2026 (the Conversion Date), consisting of 5,771,929 shares issued upon conversion of our Series A Convertible Preferred Stock and 2,305,114 shares issued upon conversion of our Series B Convertible Preferred Stock held by the Selling Stockholders, including shares of common stock issued in respect of dividends accrued and accumulated on the Preferred Stock through the earlier of the Conversion Date and October 15, 2026 at the applicable conversion price.
Common stock outstanding:	13,291,953 shares as of October 23, 2026, after giving effect to the issuance of 8,077,043 shares upon conversion of the Preferred Stock.
Use of proceeds:	We will not receive any proceeds from the sale of shares of common stock by the Selling Stockholders. See "Use of Proceeds."
Nasdaq Capital Market symbol:	AQB
Risk factors:	Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 8 of this prospectus and in our Annual Report on Form 10-K incorporated by reference herein for a discussion of factors you should carefully consider before deciding to invest in our common stock.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks described below and discussed under this section, together with other information in this prospectus and the documents incorporated by reference in this prospectus, as well as the risk factors discussed under "Part I, Item 1A. Risk Factors" in the Company's most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q which are incorporated by reference into this prospectus and any prospectus supplement, as the same may be amended, supplemented or superseded from time to time by our filings under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act. These risks could materially and adversely affect our business, operating results, cash flows and financial condition. See "Incorporation of Certain Documents By Reference" and "Cautionary Statement Regarding Forward-Looking Statements."

Risks Related to Our Business

You should read and consider risk factors specific to our business before making an investment decision. Those risks are described below and in the sections entitled "Risk Factors" in our annual report on Form 10-K for the fiscal year ended December 31, 2025, and in other documents incorporated by reference into this prospectus. Please be aware that additional risks and uncertainties not currently known to us or that we currently deem to be immaterial could also materially and adversely affect our business, results of operations, financial condition, cash flows or prospects.

We have expressed substantial doubt about our ability to continue as a going concern, which may affect our ability to conduct operations and the value of our securities.

Our independent registered public accounting firm has included an explanatory paragraph in its report on our financial statements expressing substantial doubt about our ability to continue as a going concern. This doubt is based on our history of recurring net losses, negative cash flows from operations, and our need to raise additional capital to fund our operations. Our ability to continue as a going concern is dependent on our ability to raise

additional capital through equity or debt financings, reduce expenses, and ultimately achieve profitable operations. There can be no assurance that we will be successful in these efforts. If we are unable to continue as a going concern, we may be required to take actions that could be harmful to our business and stockholders, including ceasing operations, seeking bankruptcy protection, or liquidating our assets. In such event, our stockholders could lose their entire investment, and the holders of any preferred stock then outstanding, whose claims are senior to those of our common stockholders upon liquidation, may recover more (or recover proportionately more) of the value of our assets than our common stockholders.

Our strategic review of the Ohio Farm Project may not result in a transaction or otherwise realize the value of our remaining assets.

We have expanded our strategic review of the Pioneer, Ohio/Ohio Farm Project to consider potential power generation, energy development, digital infrastructure, an outright sale, joint development, a long-term lease, and other infrastructure-related opportunities. The review may not result in any transaction or other strategic alternative, and any transaction may be delayed, require additional capital or approvals, involve significant costs or liabilities, or fail to realize the value of the assets. Changes in power, energy, digital-infrastructure, real-estate or capital markets, permitting requirements, counterparties' willingness or ability to proceed, or other factors could adversely affect our ability to monetize or develop the Ohio Farm Project and our financial condition, liquidity and results of operations.

JobsOhio has demanded that we repay a \$1.0 million economic development grant.

In August 2021, AquaBounty Farms Ohio LLC, a subsidiary of the Company, entered into a grant agreement with JobsOhio (the "Grant Agreement") and received a \$1,000,000 economic development grant in connection with the Ohio Farm Project. Under the Grant Agreement, we committed to create 112 jobs with associated payroll of approximately \$5.4 million and to make approximately \$222.1 million in fixed asset investments by December 31, 2026, and to maintain those commitments through December 31, 2028. Construction of the Ohio Farm Project was paused in June 2023, we have been selling equipment assets and we have reduced our headcount to three employees. On September 21, 2026, JobsOhio notified us that our sale of equipment and consideration of acquisition offers for the Ohio Farm Project property constitute a breach of the Grant Agreement and demanded repayment of the full \$1,000,000 of grant funds. We are currently evaluating the impact of our strategic review process and related activities on our obligations under the Grant Agreement and have engaged in discussions with JobsOhio regarding these matters. Although no assurance can be given as to the outcome of those discussions, we believe there may be opportunities to reach a mutually acceptable resolution regarding our obligations under the Grant Agreement, including with respect to the timing of any potential repayment obligations. If JobsOhio ultimately determines that we are required to repay all or a portion of the grant and we are unable to reach a resolution on acceptable terms, we could be required to make payments under the Grant Agreement, which could reduce our available cash resources and adversely affect our liquidity and financial condition. In addition, any dispute relating to the Grant Agreement could result in legal proceedings, management distraction and additional costs.

Our common stock may be delisted from Nasdaq if we do not satisfy applicable market value requirements.

In July 2026, the SEC approved a Nasdaq rule requiring companies listed on the Nasdaq Capital Market to maintain a market value of listed securities ("MVLS") of at least \$5 million (the "MVLS Rule"). A company whose MVLS remains below \$5 million for 30 consecutive business days would be immediately suspended and delisted, without a cure period. The approval of the MVLS Rule has been stayed pending review by the full Commission, and the MVLS Rule is not currently in effect. As of October 9, 2026, the market value of our listed securities was more than \$5 million. If the stay is lifted and our MVLS drops below \$5 million for 30 consecutive business days, our common stock would be suspended from trading on Nasdaq and subject to delisting. Delisting could reduce the liquidity and market price of our common stock, limit investors' ability to trade our securities, and adversely affect our ability to raise capital or use our equity securities in strategic transactions.

Risks Related to this Offering

Conversion of the Preferred Stock into shares of our common stock diluted the ownership interests of our existing common stockholders.

The conversion of our outstanding Preferred Stock resulted in the issuance of 8,077,043 shares of common stock, which was more than the 5,214,910 shares of common stock outstanding immediately before the conversion. As a result, the conversion of the Preferred Stock reduced the percentage ownership interest of our existing common stockholders and may cause the market price of our common stock to decline. Existing stockholders had no preemptive rights in connection with the conversion.

Sales of a substantial number of shares of our common stock following conversion of the Preferred Stock could cause our stock price to decline.

Sales of a substantial number of shares of our common stock in the public market following the conversion of the Preferred Stock, or the perception that such sales might occur, could cause the market price of our common stock to decline. The shares of common stock offered by this prospectus represent a significant number of shares relative to the current trading volume of our common stock. If the Selling Stockholders sell, or the market perceives that the Selling Stockholders intend to sell, substantial amounts of our common stock in the public market, the market price of our common stock could fall significantly. This could also make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of common stock by the Selling Stockholders pursuant to this prospectus. All proceeds from the sale of the shares of common stock offered by this prospectus will be received by the Selling Stockholders. The Selling Stockholders will pay any underwriting discounts and commissions 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 independent registered public accounting firm.

DESCRIPTION OF CAPITAL STOCK

The following is a description of our capital stock and the material provisions of AquaBounty's third amended and restated certificate of incorporation, as amended (the "Certificate") and bylaws, as amended and restated (the "Bylaws"). The following summary of the terms of the capital stock of AquaBounty is not intended to be complete and is subject in all respects to the applicable provisions of the Delaware General Corporation Law (the "DGCL") and the Certificate and Bylaws. See the section of this Registration Statement entitled "Where You Can Find More Information" for more information.

General

The authorized capital stock of AquaBounty consists of 75 million shares of common stock, par value \$0.001 per share, and 5 million shares of preferred stock, par value \$0.01 per share. As of October 23, 2026, 13,291,953 shares of common stock were outstanding and no shares of preferred stock were outstanding. AquaBounty preferred stock may be issued in one or more series with those terms and at those times and for any consideration as the AquaBounty Board of Directors determines.

Common Stock

Dividends and Liquidation Rights. Subject to preferences that may be applicable to any outstanding shares of our preferred stock, holders of shares of our common stock are entitled to receive ratably such dividends, if any, as our Board of Directors may declare on the common stock out of funds legally available for that purpose. Upon our liquidation, dissolution, or winding up, holders of shares of our common stock would be entitled to share ratably in all assets remaining after the payment of all debts and other liabilities and the liquidation preferences of any outstanding shares of our preferred stock.

Voting Rights. Holders of shares of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of shareholders. A majority of the votes cast at a meeting of the shareholders by the holders of shares entitled to vote is required for any action by the shareholders except (a) as otherwise provided by law or the Certificate and (b) that directors are to be elected by a plurality of the votes cast at elections. Holders of shares of our common stock do not have cumulative voting rights in the election of directors.

Our Certificate provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting; that stockholders may not take any action by written consent in lieu of a meeting; that only the chairman of our Board of Directors, our chief executive officer, or a majority of the authorized number of directors may call special meetings of stockholders; and that only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our Bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Other Rights. Holders of common stock have no preemptive, conversion, or subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

Fully Paid and Nonassessable. All of our outstanding shares of common stock are, and the shares of common stock to be issued upon conversion or exercise of our convertible securities, if applicable, will be when issued, fully paid and nonassessable.

Preferred Stock. Our Board of Directors may, without further action by our shareholders, from time to time, direct the issuance of additional shares of preferred stock in one or more series and may, at the time of issuance, determine the rights, preferences, and limitations of each series. Any such additional shares of preferred stock may have conversion, dividend, liquidation, or voting rights that could adversely affect the holders of shares of our common stock, and they may render more difficult or tend to discourage a merger, tender offer, or proxy contest; the assumption of control by a holder of a large block of our securities; or the removal of incumbent management. All outstanding shares of Series A Preferred Stock and Series B Preferred Stock converted on October 23, 2026. The converted shares were cancelled and retired and may not be reissued, sold or transferred, and no shares of either series of preferred stock remain outstanding.

Changes in Control. Certain provisions of the DGCL and of our Certificate and Bylaws could have the effect of delaying, deferring, or discouraging another party from acquiring control of us. These provisions might inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts, make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests, and prevent changes in our Board of Directors or management.

Advance Notice Procedures. The Bylaws establish advance notice procedures for shareholders to make nominations of candidates for election as directors or bring other business before an annual meeting of our shareholders. If the officer presiding at a meeting determines that a person was not nominated, or other business was not brought before the meeting, in accordance with the notice procedure, that person will not be eligible for election as a director, or that business will not be conducted at the meeting.

Authorized but Unissued Shares. The authorized but unissued shares of our common stock are available for future issuance without shareholder approval. The existence of authorized but unissued shares of our common stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger, or otherwise.

Amendment to Bylaws and Certificate. As required by the DGCL, any amendment of Certificate must first be approved by a majority of our Board of Directors and, if required by law or our Certificate, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to directors, limitation of liability, and choice of forum must be approved by not less than 66 2/3% of the outstanding shares entitled to vote on the amendment. Our Bylaws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the Bylaws, and may also be amended by the affirmative vote of at least 66 2/3% of the outstanding shares entitled to vote on the amendment.

Board Composition and Filling Vacancies. In accordance with our Certificate, members of our Board of Directors may be removed without cause by the affirmative vote of the holders of 66 2/3% or more of the shares then entitled to vote at an election of directors, or with cause by the affirmative vote of a majority of the shares then

entitled to vote at an election of directors. Furthermore, any vacancy on our Board of Directors, however occurring, including a vacancy resulting from an increase in the size of our Board of Directors, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. Our Board of Directors is not divided into classes.

Forum. Our Certificate provides that the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, or other employee to us or to our stockholders; (3) any action asserting a claim arising pursuant to any provision of the DGCL; or (4) any action asserting a claim governed by the internal affairs doctrine.

Transfer Agent. The transfer agent for our common stock is Computershare Trust Company, N.A.

Listing. Our common stock is listed on the Nasdaq Capital Market under the symbol “AQB.”

Preferred Stock

AquaBounty preferred stock may be issued by vote of the AquaBounty Board of Directors without shareholder approval. AquaBounty preferred stock may be issued in one or more classes and series, with such designations, voting rights (or without voting rights), redemption, conversion or sinking fund provisions, dividend rates or provisions, liquidation rights, and other preferences and limitations as the AquaBounty Board of Directors may determine in the exercise of its business judgment. The Board designated two series of Preferred Stock: Series A Convertible Preferred Stock and Series B Convertible Preferred Stock. All outstanding shares of Series A Preferred Stock and Series B Preferred Stock converted into common stock automatically on October 23, 2026, the Conversion Date. The converted shares were cancelled and retired and may not be reissued, sold or transferred, and no shares of either series of preferred stock remain outstanding.

Shares of AquaBounty preferred stock could be issued in public or private transactions in one or more issues. The shares of any issue of AquaBounty preferred stock could be issued with rights, including voting, dividend, and liquidation features, superior to those of any issue or class of shares, including the shares of AquaBounty common stock. The issuance of shares of AquaBounty preferred stock could serve to dilute the voting rights or ownership percentage of the holders of AquaBounty common stock. The issuance of AquaBounty preferred stock might also serve to deter or block any attempt to obtain control of AquaBounty or to facilitate any such attempt.

Series A Convertible Preferred Stock

On April 7, 2026, we filed a Certificate of Designations designating Series A Convertible Preferred Stock. Historically, each share had a liquidation value of \$18.2580, cumulative dividends at a rate of 18.0% per annum and an initial conversion price of \$0.9129 per share. All outstanding Series A Preferred Stock converted into common stock on October 23, 2026, the Conversion Date, and the converted shares were cancelled and retired and may not be reissued, sold or transferred.

Series B Convertible Preferred Stock

On June 25, 2026, we filed a Certificate of Designations designating Series B Convertible Preferred Stock. Historically, each share had a liquidation value of \$20.60, cumulative dividends at a rate of 18.0% per annum and an initial conversion price of \$1.03 per share. All outstanding Series B Preferred Stock converted into common stock on October 23, 2026, the Conversion Date, and the converted shares were cancelled and retired and may not be reissued, sold or transferred.

SELLING STOCKHOLDERS

This prospectus relates to the resale of up to 8,077,043 shares of our common stock issued upon conversion of shares of Preferred Stock held by the Selling Stockholders identified in the table below, including shares of common stock issued in respect of dividends accrued and accumulated on the Preferred Stock through the earlier of the Conversion Date and October 15, 2026 at the applicable conversion price.

The Selling Stockholders received the shares of common stock upon conversion on October 23, 2026 of Preferred Stock acquired in the private placement that closed on or about April 7, 2026 and the private placement that closed on June 25, 2026. Pursuant to the Conversion Agreements, we agreed to file this registration statement to register for resale the shares of common stock issued upon conversion of the Preferred Stock, including shares issued in respect of accrued and accumulated dividends on the Preferred Stock through the earlier of the Conversion Date and October 15, 2026.

The table below sets forth, to our knowledge based on information provided by the Selling Stockholders, information regarding beneficial ownership of our securities by each Selling Stockholder as of October 23, 2026, and the number of shares of common stock that may be offered under this prospectus by each Selling Stockholder. The number of shares in the column "Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus" represents all of the shares that a Selling Stockholder may offer under this prospectus, and the Selling Stockholders may sell some, all, or none of their shares. We do not know how many shares, if any, will be sold by the Selling Stockholders in any particular offering.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to the securities. The percentages of common stock beneficially owned both prior to and after this offering are based on 13,291,953 shares of common stock outstanding as of October 23, 2026.

Univest Securities, LLC ("Univest") has acted as our placement agent in the following transactions: (i) our October 2025 private placement of \$4.0 million of senior notes, for which it received a placement fee of \$280,000 (equal to 7% of the gross proceeds) and reimbursement of \$125,000 of expenses; (ii) our February 2026 registered direct offering of common stock and pre-funded warrants, for which it received a placement fee of \$80,500 (equal to 7% of the gross proceeds) and reimbursement of \$30,000 of expenses; (iii) the \$500,000 cash portion of our April 2026 Series A Preferred Stock private placement, for which it received a placement fee of \$35,000 (equal to 7% of the gross cash proceeds); and (iv) our June 2026 Series B Preferred Stock private placement, for which it received a placement fee of \$157,500 (equal to 7% of the gross proceeds). In connection with the April 2026 Series A Preferred Stock private placement, we granted Univest a right of first refusal, for a period of 18 months following the closing of that placement, to act as our underwriter, placement agent or financial advisor in certain future financings and strategic transactions, subject to certain exceptions. Univest acquired its shares of Series A Preferred Stock in exchange for senior notes it purchased as an investor and not as placement agent compensation. Bradley Richmond is the Chief Operating Officer of Univest. Univest is a registered broker-dealer and is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act with respect to the shares of common stock it offers under this prospectus. Mr. Richmond is an affiliate of a broker-dealer. Mr. Richmond has advised us that he acquired the Preferred Stock 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.

Except as described in this prospectus or in the documents incorporated by reference herein, none of the Selling Stockholders has had any position, office or other material relationship with us or any of our affiliates within the past three years, other than as a result of the ownership of our securities. To our knowledge, other than Univest and Mr. Richmond, no Selling Stockholder is a broker-dealer or an affiliate of a broker-dealer.

	Shares of Common Stock Beneficially Owned Prior to Offering		Maximum Number of Shares of Common Stock Being Offered		Shares of Common Stock Beneficially Owned After Offering	
Name	Number	%	Number	Number	%	
About Investment Pte. Ltd. (1)	1,892,469	14.24%	1,892,469	-	*	
BANFI Advisory Co (2)	171,075	1.29%	171,075	-	*	
Canada Wisterias International Investment Co., Ltd. (3)	45,079	*	45,079	-	*	
Todd A. Carpenter (4)	412,288	3.10%	412,288	-	*	
John D Cranmer (5)	51,221	*	51,221	-	*	
Philip A. Faraci (6)	282,976	2.13%	282,976	-	*	
Dennis Holman (7)	25,621	*	25,621	-	*	
Honey Tree Trading (8)	204,905	1.54%	204,905	-	*	
Horberg Enterprises LP (9)	303,731	2.29%	129,312	174,419	1.31%	
Noel D Ischy (10)	25,621	*	25,621	-	*	
Qiyang Li (11)	10,763	*	10,763	-	*	
Xinlei Liu (12)	98,263	*	98,263	-	*	
Daryl Olsen (13)	619,710	4.66%	619,710	-	*	
Theodore Ralston (14)	102,442	*	102,442	-	*	
Bradley Richmond (15)	735,973	5.54%	258,624	477,349	3.59%	
James Schoonover (16)	102,442	*	102,442	-	*	
Sydney Cleveland Seaforth (17)	51,221	*	51,221	-	*	
Saverio Solimeo (18)	129,312	*	129,312	-	*	
Supereight Capital Holdings, Ltd (19)	356,487	2.68%	307,347	49,140	*	
Univest Securities LLC (20)	1,422,472	10.70%	1,422,472	-	*	
Hongyu Wang (21)	1,034,536	7.78%	1,034,536	-	*	
Meidi Wang (22)	514,299	3.87%	514,299	-	*	
Chao Xing (23)	103,075	*	103,075	-	*	
Xiaoya Yue (24)	81,970	*	81,970	-	*	
Total	8,777,951		8,077,043	700,908		

* Represents beneficial ownership of less than 1% of our outstanding common stock.

(1) Consists of 1,892,469 shares of common stock issued upon conversion of 86,478 shares of Series A Convertible Preferred Stock. Jiaming Li, the Chief Executive Officer and Executive Director of About Investment Pte. Ltd., may exercise the power to vote and dispose of the shares held by About Investment Pte. Ltd. and may be deemed to beneficially own such shares. About Investment Pte. Ltd. and Mr. Li report shared voting and dispositive power over such shares. This disclosure is based in part on a Schedule 13G filed jointly by About Investment Pte. Ltd. and Mr. Li with the SEC on May 21, 2026, as supplemented by information provided to us by About Investment Pte. Ltd. The address of About Investment Pte. Ltd. is 71 Robinson Road, Singapore 068895.

(2) Consists of 171,075 shares of common stock issued upon conversion of 8,106 shares of Series B Convertible Preferred Stock. Qiang Wang, the owner of BANFI Advisory Co, has voting and investment power over the shares held by BANFI Advisory Co and may be deemed to beneficially own such shares.

(3) Consists of 45,079 shares of common stock issued upon conversion of 2,136 shares of Series B Convertible Preferred Stock. Ouna Tong, a director of Canada Wisterias International Investment Co., Ltd., has voting and investment power over the shares held by Canada Wisterias International Investment Co., Ltd. and may be deemed to beneficially own such shares.

- (4) Consists of (i) 258,624 shares of common stock issued upon conversion of 11,818 shares of Series A Convertible Preferred Stock and (ii) 153,664 shares of common stock issued upon conversion of 7,281 shares of Series B Convertible Preferred Stock. The address of Mr. Carpenter is 3421 S. Blaine Street, Grand Island, NE 68801.
- (5) Consists of 51,221 shares of common stock issued upon conversion of 2,427 shares of Series B Convertible Preferred Stock.
- (6) Consists of (i) 129,312 shares of common stock issued upon conversion of 5,909 shares of Series A Convertible Preferred Stock and (ii) 153,664 shares of common stock issued upon conversion of 7,281 shares of Series B Convertible Preferred Stock. The address of Mr. Faraci is 7105 N. Grand Canyon Drive, Las Vegas, NV 89149.
- (7) Consists of 25,621 shares of common stock issued upon conversion of 1,214 shares of Series B Convertible Preferred Stock.
- (8) Consists of 204,905 shares of common stock issued upon conversion of 9,709 shares of Series B Convertible Preferred Stock. Nicole Helton, a director of Honey Tree Trading, has voting and investment power over the shares held by Honey Tree Trading and may be deemed to beneficially own such shares.
- (9) Consists of (i) 174,419 shares of common stock and (ii) 129,312 shares of common stock issued upon conversion of 5,909 shares of Series A Convertible Preferred Stock. Todd Horberg, the Managing Partner of Horberg Enterprises LP, has voting and investment power over the shares held by Horberg Enterprises LP and may be deemed to beneficially own such shares. The address of Horberg Enterprises LP is 915 McCormick Lane, Lake Forest, IL 60045.
- (10) Consists of 25,621 shares of common stock issued upon conversion of 1,214 shares of Series B Convertible Preferred Stock.
- (11) Consists of 10,763 shares of common stock issued upon conversion of 510 shares of Series B Convertible Preferred Stock.
- (12) Consists of 98,263 shares of common stock issued upon conversion of 4,656 shares of Series B Convertible Preferred Stock.
- (13) Consists of (i) 517,268 shares of common stock issued upon conversion of 23,637 shares of Series A Convertible Preferred Stock and (ii) 102,442 shares of common stock issued upon conversion of 4,854 shares of Series B Convertible Preferred Stock. The address of Mr. Olsen is 270 W. 1450 N., Centerville, UT 84014.
- (14) Consists of 102,442 shares of common stock issued upon conversion of 4,854 shares of Series B Convertible Preferred Stock.
- (15) Consists of (i) 477,349 shares of common stock and (ii) 258,624 shares of common stock issued upon conversion of 11,818 shares of Series A Convertible Preferred Stock. Mr. Richmond has sole investment power over these shares. Mr. Richmond has advised us that he will vote these shares together with Univest Securities LLC; accordingly, Mr. Richmond and Univest Securities LLC may be deemed to share voting power over these shares and to constitute a “group” within the meaning of Section 13(d)(3) of the Exchange Act. As a member of such group, Mr. Richmond may be deemed to beneficially own the 1,422,472 shares beneficially owned by Univest Securities LLC (see footnote (20)), for a combined total of 2,158,445 shares, or approximately 16.24% of our outstanding common stock, calculated in accordance with Rule 13d-3. Mr. Richmond is the Chief Operating Officer of Univest Securities LLC, a registered broker-dealer, and is therefore an affiliate of a broker-dealer. Mr. Richmond has advised us that he acquired the shares offered hereby in the ordinary course of business and, at the time of such acquisition, had no agreements or understandings, directly or indirectly, with any person to distribute such shares. The address of Mr. Richmond is 30 Tintern Lane, Scarsdale, NY 10583.
- (16) Consists of 102,442 shares of common stock issued upon conversion of 4,854 shares of Series B Convertible Preferred Stock.
- (17) Consists of 51,221 shares of common stock issued upon conversion of 2,427 shares of Series B Convertible Preferred Stock.
- (18) Consists of 129,312 shares of common stock issued upon conversion of 5,909 shares of Series A Convertible Preferred Stock.
- (19) Consists of (i) 49,140 shares of common stock and (ii) 307,347 shares of common stock issued upon conversion of 14,563 shares of Series B Convertible Preferred Stock. Richard Calta, the President of Supereight Capital Holdings Ltd, has voting and investment power over the shares held by Supereight Capital Holdings Ltd and may be deemed to beneficially own such shares. The address of Supereight Capital Holdings Ltd is 9901 N. 50th Street, Paradise Valley, AZ 85253.
- (20) Consists of 1,422,472 shares of common stock issued upon conversion of 65,001 shares of Series A Convertible Preferred Stock. Yi Guo, the Chief Executive Officer of Univest Securities LLC, has voting and investment power over the shares held by Univest Securities LLC and may be deemed to beneficially own such shares. Bradley Richmond, the Chief Operating Officer of Univest Securities LLC, has advised us that he will vote the 735,973 shares he beneficially owns together with Univest Securities LLC; accordingly, Univest Securities LLC and Mr. Richmond may be deemed to share voting power over Mr. Richmond’s shares and to constitute a “group” within the meaning of Section 13(d)(3) of the Exchange Act that beneficially owns a combined 2,158,445 shares, or approximately 16.24% of our outstanding common stock, calculated in accordance with Rule 13d-3 (see footnote (15)). Univest Securities LLC disclaims beneficial ownership of the shares held by Mr. Richmond. Univest Securities LLC acquired its shares of Series A Preferred Stock in exchange for senior notes it purchased as an investor and not as placement agent compensation. Univest Securities LLC is a registered broker-dealer and is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act with respect to the shares it offers hereby. The address of Univest Securities LLC is 75 Rockefeller Plaza, Suite 25A, New York, NY 10019.
- (21) Consists of 1,034,536 shares of common stock issued upon conversion of 47,274 shares of Series A Convertible Preferred Stock. The address of Hongyu Wang is No. 1702, Building 50, East Area, Binhai New Village, Binhai New Area, Tianjin, China.
- (22) Consists of 514,299 shares of common stock issued upon conversion of 24,369 shares of Series B Convertible Preferred Stock. The address of Meidi Wang is 97-68 Zhifa Road, Shanghai, China.
- (23) Consists of 103,075 shares of common stock issued upon conversion of 4,884 shares of Series B Convertible Preferred Stock.
- (24) Consists of 81,970 shares of common stock issued upon conversion of 3,884 shares of Series B Convertible Preferred Stock.

PLAN OF DISTRIBUTION

The selling stockholders (which term as used in this prospectus includes the selling stockholders listed in the table under the heading “Selling Stockholders” and their respective donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from the selling stockholders as a gift, pledge, partnership distribution or other transfer) may, from time to time, sell, transfer or otherwise dispose of any or all of the common stock offered by this prospectus or any applicable prospectus supplement on any stock exchange, market or trading facility on which such common stock is traded or in private transactions. These prices will be determined by the selling stockholders or by agreement between the selling stockholders and underwriters, broker-dealers or agents who may receive fees or commissions in connection with any such sale.

The selling stockholders may use any one or more of the following methods when disposing of the offered common stock:

- sales on the Nasdaq Capital Market or any national securities exchange or quotation service on which our common stock may be listed or quoted at the time of sale;
- to or through underwriters, brokers or dealers;
- directly to one or more purchasers;
- through agents;
- “at the market offerings” to or through market makers or into an existing market for the securities;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades (which may involve crosses) 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;
- privately negotiated transactions;
- an exchange distribution and/or secondary distribution in accordance with the rules of the applicable exchange;
- short sales (including short sales “against the box”);
- through the writing or settlement of standardized or over-the-counter options or other hedging or derivative transactions, whether through an options exchange or otherwise;
- by pledge to secure debts and other obligations;
- in other ways not involving market makers or established trading markets, including direct sales to purchasers or sales effected through agents;
- broker-dealers may agree to sell a specified number of such common stock at a stipulated price per share;
- through the distributions of the shares by any selling stockholder to its general or limited partners, members, managers, affiliates, funds, employees, directors or shareholders;
- in option transactions;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law and described in an applicable prospectus

supplement.

Any public offering price and any discounts, commissions or concessions allowed or reallocated or paid to dealers may be changed from time to time.

The selling stockholders may effect the distribution of the securities from time to time in one or more transactions either:

- at a fixed price or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices relating to the prevailing market prices; or
- at negotiated prices.

The selling stockholders may act independently of us in making decisions with respect to the timing, manner and size of each sale.

The selling stockholders may transfer their shares of common stock in other circumstances, in which case the transferees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending 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 the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

Offers to purchase securities may be solicited directly by the selling stockholders and the sale thereof may be made by the selling stockholders directly to institutional investors or others. In such a case, no underwriters or agents would be involved. The selling stockholders may use electronic media, including the Internet, to sell offered securities directly.

If underwriters are used in the sale of any securities, the securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The securities may be either offered to the public through underwriting syndicates represented by managing underwriters, or directly by underwriters. Generally, the underwriters' obligations to purchase the securities will be subject to certain conditions precedent. Depending on the type of offering, the underwriters may be obligated to purchase all of the securities if they purchase any of the securities. The underwriters may receive compensation from the selling stockholders, for whom they may act as agents, in the form of discounts, concessions or commissions. Underwriters may sell our common stock to or through dealers, and the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. Such compensation may be in excess of customary discounts, concessions or commissions.

The selling stockholders may offer the securities covered by this prospectus into an existing trading market on the terms described in the prospectus supplement relating thereto. Underwriters, dealers and agents who participate in any at-the-market offerings will be described in the prospectus supplement relating thereto. The terms of each such agreement will be set forth in more detail in the applicable prospectus supplement.

The selling stockholders may sell the securities through agents from time to time. Generally, any agent will be acting on a best efforts basis for the period of its appointment.

If the selling stockholders utilize a dealer in the sale of the securities in respect of which this prospectus is delivered, the selling stockholder may sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by the dealer at the time of resale.

In effecting sales, broker-dealers or agents engaged by the selling stockholder may arrange for other broker-dealers to participate. Broker-dealers or agents may receive commissions, discounts, or concessions from the selling stockholder in amounts to be negotiated immediately before the sale. Such compensation may be in excess of customary discounts, concessions or commissions.

In connection with the sale 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 covered by this prospectus in the course of hedging the positions they assume. The selling stockholders may also sell short the securities covered by this prospectus and deliver the securities to close out short positions, or loan or pledge the securities covered by this prospectus to broker-dealers that in turn may sell these securities. The selling stockholders may enter into options or other transactions with broker-dealers or other financial institutions that involve the delivery of the shares offered hereby to the broker-dealers or other financial institutions, who may then resell or otherwise transfer those securities.

A selling stockholder that is an entity may elect to make a pro rata in-kind distribution of the shares of common stock to its members, partners or shareholders. To the extent a distributee is an affiliate of ours (or to the extent otherwise required by law), we may file a prospectus supplement in order to permit the distributees to use the prospectus to resell the common stock acquired in the distribution. To the extent that such members, partners or shareholders are not affiliates of ours, such members, partners or shareholders would thereby receive freely tradeable shares of our common stock pursuant to the distribution through this registration statement. A selling stockholder that is an individual may make gifts of shares of common stock covered hereby. Such donees may use the prospectus to resell the shares or, if required by law, we may file a prospectus supplement naming such donees. Unless the context otherwise requires, as used in this prospectus, “selling stockholder” includes donees, pledgees, transferees or other successors-in-interest selling shares received from the selling stockholder as the result of a gift, pledge, partnership distribution or other transfer after the date of this prospectus, and any such persons will be named in the applicable prospectus supplement.

Any underwriter, broker-dealer, or agent that participates in the distribution of the securities may be deemed to be an “underwriter” as defined in the Securities Act. Any commissions paid or any discounts or concessions allowed to any such persons, and any profits they receive on resale of the securities, may be deemed to be underwriting discounts and commissions under the Securities Act. To the extent required, we will identify any underwriters or agents and describe their compensation in a prospectus supplement. To the extent required, any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers, will be provided in the applicable prospectus supplement.

Univest Securities, LLC, a registered broker-dealer and a Selling Stockholder, is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act with respect to the shares of common stock it offers under this prospectus. Any profits realized by Univest on the resale of such shares, and any commissions or other compensation received, may be deemed to be underwriting discounts and commissions under the Securities Act.

The aggregate proceeds to the selling stockholder from the sale of any securities will be the purchase price of such securities less discounts and commissions, if any.

Underwriters or agents may purchase and sell the securities in the open market. These transactions may include over-allotment, stabilizing transactions, syndicate covering transactions and penalty bids. Over-allotment involves sales in excess of the offering size, which creates a short position. Stabilizing transactions consist of bids or purchases for the purpose of preventing or retarding a decline in the market price of the securities and are permitted so long as the stabilizing bids do not exceed a specified maximum. Syndicate covering transactions involve the placing of any bid on behalf of the underwriting syndicate or the effecting of any purchase to reduce a short position created in connection with the offering. The underwriters or agents also may impose a penalty bid, which permits them to reclaim selling concessions allowed to syndicate members or certain dealers if they repurchase the securities in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the securities, which may be higher than the price that might otherwise prevail in the open market. These activities, if begun, may be discontinued at any time. These transactions may be effected on any exchange on which the securities are traded, in the over-the-counter market or otherwise.

Agents, broker-dealers and underwriters may be entitled to indemnification by us and, if applicable, the

selling stockholder, against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the agents or underwriters may be required to make in respect thereof.

Agents, broker-dealers and underwriters or their affiliates may engage in transactions with, or perform services for, the selling stockholders (or their affiliates) in the ordinary course of business. The selling stockholders may also use underwriters or other third parties with whom such selling stockholders have a material relationship. The selling stockholders (or their affiliates) will describe the nature of any such relationship in the applicable prospectus supplement.

The selling stockholders are subject to the applicable provisions of the Exchange Act and the rules and regulations under the Exchange Act, including Regulation M, which may limit the timing of purchases and sales of any of the securities offered in this prospectus by the selling stockholders and any other person. The anti-manipulation rules under the Exchange Act may apply to sales of securities in the market and to the actions of the selling stockholders and their respective affiliates.

In order to comply with the securities laws of certain states, if applicable, the securities must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the securities 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.

There can be no assurances that the selling stockholders will sell, nor are the selling stockholders required to sell, any or all of the securities offered under this prospectus.

To the extent required, this prospectus may be amended and/or supplemented from time to time to describe a specific plan of distribution. Instead of selling securities under this prospectus, the selling stockholders may sell the securities offered under Rule 144 or pursuant to any other available exemptions from the registration requirements of the Securities Act, if, when and to the extent such exemption is available to them at the time of such sale.

LEGAL MATTERS

The validity of the shares of our common stock offered by this prospectus will be passed upon for us by FBT Gibbons LLP, Louisville, Kentucky.

EXPERTS

The financial statements of AquaBounty Technologies, Inc. incorporated by reference in this Prospectus, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such 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 file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including us. The SEC's internet site can be found at <http://www.sec.gov>. We make available free of charge most of our SEC filings on the investor relations page of our website <https://investors.aquabounty.com/> as soon as reasonably practicable after we electronically file these materials with the SEC. You may access these SEC filings on our website. Except for those SEC filings incorporated by reference in this prospectus, none of the other information on our website is part of this prospectus or incorporated by reference into this prospectus or any accompanying prospectus supplement.

This prospectus is part of a registration statement filed on Form S-3 with the SEC under the Securities Act of 1933, as amended (the "Securities Act"), and the rules and regulations promulgated by the SEC thereunder. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. For further information concerning us and the securities, you should read the entire registration statement and the additional information described under "Incorporation of Certain Documents by Reference" below. The registration statement has been filed electronically and may be obtained in any manner listed

above. Any statements contained herein concerning the provisions of any document are not necessarily complete, and, in each instance, please refer to the copy of the relevant document filed as an exhibit to the registration statement or otherwise filed with the SEC. Each such statement is qualified in its entirety by reference to the document it describes.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus information that we file with the SEC. This permits us to disclose important information to you by referencing these filed documents. Any information referenced this way is considered to be a part of this prospectus and any information filed by us with the SEC subsequent to the date of this prospectus will automatically be deemed to update and supersede this prospectus. We incorporate by reference into this prospectus and any accompanying prospectus supplement the following documents that we have already filed with the SEC (other than any portion of such filings that are furnished, rather than filed, under the SEC’s applicable rules):

- " [Our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the SEC on March 31, 2026, including information specifically incorporated by reference into such Annual Report from our definitive proxy statement on Schedule 14A;](#)
- " [Our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2026, filed with the SEC on May 7, 2026, and for the quarter ended June 30, 2026, filed with the SEC on August 6, 2026;](#)
- " [Our Current Reports on Form 8-K filed with the SEC on February 12, 2026, April 8, 2026, June 25, 2026, June 30, 2026, July 8, 2026, October 8, 2026, and October 23, 2026 \(other than the portions of those documents deemed furnished and not filed\), and our Current Reports on Form 8-K/A filed with the SEC on February 4, 2026, March 31, 2026, April 8, 2026, and April 17, 2026 \(other than the portions of those documents deemed furnished and not filed\);](#)
- " [Our definitive proxy statement on Schedule 14A filed with the SEC on May 1, 2026 in connection with our annual meeting of stockholders held on June 23, 2026;](#)
- " [The description of our capital stock contained in our registration statement on Form 10-12B filed with the SEC, as updated by Exhibit 4.3 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC on March 10, 2020, and as such description may be further updated or amended in any amendment or report filed with the SEC for the purpose of updating such description.](#)

We incorporate by reference additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (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 the effectiveness of such registration statement and (ii) after the date of this prospectus and before the termination of the offering of the securities described in this prospectus (other than any information that has been “furnished” but not “filed” for purposes of the Exchange Act and applicable SEC rules). These documents include our 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 our proxy statements. Any statement made in this prospectus or in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document that is also incorporated or deemed to be incorporated by reference in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a free copy of any of the documents incorporated by reference in this prospectus (other than exhibits to such documents, unless the exhibits are specifically incorporated by reference in such documents) by writing or telephoning us at the following address:

AquaBounty Technologies, Inc.
233 Ayer Road, Suite 4
Harvard, Massachusetts 01451
Attention: Investor Relations
Telephone: (978) 648-6000

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus. You may also access these documents on our investor relations website at <https://investors.aquabounty.com>.