

SUBJECT TO COMPLETION, DATED SEPTEMBER 10, 2026

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus Dated August 19, 2026)

Shares of Common Stock

Pre-funded Warrants to Purchase

Shares of Common Stock

We are offering _____ shares of our common stock and, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase _____ shares of our common stock. The purchase price of each pre-funded warrant will equal the price per share at which shares of our common stock are being sold to the public in this offering, minus \$0.0001 per share of common stock, the exercise price of each pre-funded warrant. The public offering price for each share of common stock is \$ _____. We are also offering the shares of our common stock that are issuable from time to time upon exercise of the pre-funded warrants. Our common stock trades on the Nasdaq Capital Market ("Nasdaq") under the symbol "YARW." On September 9, 2026, the last reported sale price for our common stock on Nasdaq was \$29.11 per share.

There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. We do not intend to apply for listing of the pre-funded warrants on Nasdaq or any securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the pre-funded warrants will be limited.

Investing in our securities involves risks. See the section titled "Risk Factors" beginning on page S-6 of this prospectus supplement and page 4 of the accompanying prospectus, as well as in the documents incorporated by reference herein and therein, to read about factors you should consider before buying our securities.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved these securities, or passed upon the accuracy or adequacy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

	PER SHARE	PER PRE-FUNDED WARRANT	TOTAL
Public Offering Price	\$ _____	\$ _____	\$ _____
Underwriting Discounts and Commissions ⁽¹⁾	\$ _____	\$ _____	\$ _____
Proceeds, Before Expenses, to Yarrow Bioscience, Inc.	\$ _____	\$ _____	\$ _____

(1) See the section titled "Underwriting" for additional information regarding underwriting compensation.

Delivery of the shares of common stock and pre-funded warrants is expected to be made on or about _____, 2026.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional _____ shares of our common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be \$ _____ and the total proceeds to us, before expenses, will be \$ _____.

Joint Book-Running Managers

Jefferies

TD Cowen

Guggenheim Securities

Lead Manager

LifeSci Capital

Prospectus supplement, dated _____

, 2026

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (“SEC”) pursuant to the Securities Act of 1933, as amended (the “Securities Act”), utilizing a “shelf” registration process. We provide information to you about this offering of our securities in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this “prospectus,” we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement. However, if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in this prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

We have not, and the underwriters have not, authorized anyone to provide you with information other than in this prospectus supplement, the accompanying prospectus or any free writing prospectus we may authorize to be delivered or made available to you. We take no responsibility for and cannot provide any assurance as to the reliability of any other information others may give you. We are not, and the underwriters are not, making an offer to sell our securities in any jurisdiction where the offer or sale is not permitted. The information in this prospectus supplement, the accompanying prospectus or any free writing prospectus is accurate only as of its date, regardless of its time of delivery or of any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement titled “Where You Can Find More Information” and “Incorporation by Reference.”

For investors outside the United States: we have not, and the underwriters have not, done anything that would permit this offering, or possession or distribution of this prospectus supplement and the accompanying prospectus, in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of our securities and the distribution of this prospectus supplement and the accompanying prospectus outside of the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus and does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus supplement, including the information incorporated by reference herein, the accompanying prospectus and any related free writing prospectus, carefully, including the section titled “Risk Factors” included elsewhere in this prospectus supplement, the accompanying prospectus and any related free writing prospectus, and in the sections titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes thereto included in our [Quarterly Report on Form 10-Q for the quarter ended June 30, 2026](#) and [Current Report on Form 8-K/A filed with the SEC on August 13, 2026](#), before making an investment decision. Some of the statements in this summary constitute forward-looking statements; see the section titled “Special Note Regarding Forward-Looking Statements.” In this prospectus supplement, unless the context requires otherwise, references to “we,” “us,” “our,” “Yarrow” or “the Company” refer to Yarrow Bioscience, Inc.

Overview

We are a clinical-stage biotechnology company focused on developing transformative therapies to treat autoimmune thyroid diseases. Our lead product candidate, YB-101 (also known as GenSci098), is a humanized, monoclonal antibody targeting the thyroid-stimulating hormone receptor (“TSHR”), which we plan to develop for the treatment of Graves’ disease (“GD”), and thyroid eye disease (“TED”). Both GD and TED are serious and poorly treated autoimmune diseases in which autoantibodies against TSHR attack and overstimulate the receptor, leading to a wide spectrum of thyroidal and extra-thyroidal clinical sequelae.

YB-101 was designed to selectively bind to TSHR and block autoantibody-induced receptor activation, thereby directly inhibiting the pathogenic activity of thyroid-stimulating autoantibodies that drive disease progression in GD and TED as well as the biological pathway responsible for hyperthyroidism and orbitopathy. We believe that this novel and targeted approach represents a potential breakthrough for patients with GD and TED and has the potential to address an important unmet need for therapies with differentiated risk-benefit profiles.

Results of Operations and Financial Condition as of August 31, 2026

Our consolidated financial statements as of and for the three and nine months ended September 30, 2026 are not yet available, and our closing procedures for the month ended August 31, 2026 are not yet complete. We estimate that our cash and cash equivalents as of August 31, 2026 were approximately \$108.8 million, as compared to \$18.7 million as of June 30, 2026.

This preliminary estimate is derived from our internal books and records and reflects management’s preliminary determinations based on information currently available. Our financial closing procedures for the period are not complete, and our actual results may differ materially from this estimate as a result of the completion of those procedures, final adjustments, and other developments arising before our financial statements for the period are finalized. This preliminary estimate is not a comprehensive statement of our financial results, is not necessarily indicative of results for any future period and should not be viewed as a substitute for financial statements prepared in accordance with generally accepted accounting principles in the United States of America. You should not place undue reliance on it.

This preliminary estimate has been prepared by, and is the responsibility of, our management. Baker Tilly US, LLP, our independent registered public accounting firm, has not audited, reviewed, compiled, or performed any procedures with respect to this preliminary estimate. Accordingly, Baker Tilly US, LLP does not express an opinion or any other form of assurance with respect thereto and assumes no responsibility for, and disclaims any association with, this preliminary financial data.

We expect the net proceeds from this offering, combined with our existing cash, cash equivalents and investments, to fund operations into 2030, including completion of our Phase 2b GD trial and preparatory work for our next planned TED study. This estimate is based on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than expected. See the sections titled “Risk

Factors” and “Special Note Regarding Forward-Looking Statements” included elsewhere in this prospectus supplement for more information.

Corporate Information

We were incorporated in October 2011 as a Delaware corporation under the name Tigercat Pharma, Inc. In September 2020, we changed our name from “Menlo Therapeutics Inc.” to “VYNE Therapeutics Inc.,” following our merger with Foamix Pharmaceuticals Ltd. in March 2020. In July 2026, we changed our name from “VYNE Therapeutics Inc.” to “Yarrow Bioscience, Inc.,” following our merger (the “Merger”) with Yarrow Bioscience Operating Company Corp. (formerly known as Yarrow Bioscience, Inc.) (“Pre-Merger Yarrow”). Our Company prior to the Merger is referred to herein as “Pre-Merger VYNE.”

On July 24, 2026, we effected a 1-for-50 reverse stock split of our common stock (the “Reverse Stock Split”). All references to common stock share and per share amounts in this prospectus supplement are presented on a post-Reverse Stock Split basis.

Our principal executive offices are located at 470 James Street, Suite 007, New Haven, Connecticut 06513 and our telephone number is (203) 433-7577. Our website address is www.yarrowbioscience.com. The information contained on, or accessible through, our website is not incorporated by reference into this prospectus or the accompanying base prospectus. We have included our website in this prospectus solely as an inactive textual reference.

We make available on or through our website certain reports and amendments to those reports that we file with, or furnish to, the SEC in accordance with the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These include our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. We make this information available on or through our website free of charge as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC.

Implications of Being a Smaller Reporting Company

We are currently a “smaller reporting company” as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than \$250.0 million or (ii) our annual revenue was less than \$100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700.0 million. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and have reduced disclosure obligations regarding executive compensation.

THE OFFERING

Common stock offered by us	shares.
Pre-funded warrants offered by us	We are also offering, in lieu of common stock to certain investors that so choose, pre-funded warrants to purchase shares of our common stock. The purchase price of each pre-funded warrant equals the price per share at which the shares of our common stock are being sold to the public in this offering, minus \$0.0001 per share of common stock, which is the exercise price of each pre-funded warrant. Each pre-funded warrant will be exercisable at any time after the date of issuance of such pre-funded warrant, subject to an ownership limitation. See the section titled “Description of Securities We Are Offering” for additional information. This prospectus supplement also relates to the offering of the shares of our common stock issuable upon exercise of the pre-funded warrants.
Option to purchase additional shares of common stock	The underwriters have a 30-day option to purchase up to additional shares of our common stock at the public offering price, less underwriting discounts and commissions.
Common stock to be outstanding immediately after this offering	shares, or shares if the underwriters exercise their option to purchase additional shares of our common stock in full, assuming no exercise of the pre-funded warrants offered and sold in this offering.
Use of proceeds	We estimate that our net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise in full their option to purchase additional shares of our common stock), based on the public offering price of \$ per share, after deducting the underwriting discounts and commissions and estimated offering expenses and advisory fees payable by us. We intend to use the net proceeds of this offering, together with our existing cash, cash equivalents and investments, to fund research and development expenses for our pipeline and general corporate purposes, which may include working capital, capital expenditures and other general corporate purposes. See the section titled “Use of Proceeds” for additional information.
Risk factors	You should carefully read and consider the information set forth in the section titled “Risk Factors,” together with all of the other information included in or incorporated by reference, in this prospectus supplement before deciding whether to invest in our securities.
Nasdaq Capital Market trading symbol	“YARW.” There is no established public trading market for the pre-funded warrants, and we do not intend to apply for listing of the pre-funded warrants on the Nasdaq Capital Market or any securities exchange or nationally recognized trading system.

All information in this prospectus supplement related to the number of shares of our common stock to be outstanding immediately after this offering is based on 2,803,078 shares of our common stock outstanding as of June 30, 2026 on a pro forma basis, as set forth in our unaudited pro forma condensed combined financial information as of June 30, 2026 included in our Current Report on Form 8-K/A filed with the SEC

on August 13, 2026, which gives effect to the Merger and combines the historical balance sheets of Pre-Merger VYNE and Pre-Merger Yarrow as if the Merger had been consummated as of such date. The pro forma number of shares of our common stock outstanding as of June 30, 2026 as used throughout this prospectus supplement, unless otherwise indicated, excludes:

- 2,002,282 shares of common stock issuable on a pro forma basis upon the exercise of stock options outstanding as of June 30, 2026, at a weighted-average exercise price of \$6.19 per share;
- 25,781,240 shares of common stock issuable on a pro forma basis upon the exercise of pre-funded warrants outstanding as of June 30, 2026, at a weighted-average exercise price of \$0.0001 per share;
- 2,688,931 shares of common stock reserved for future issuance on a pro forma basis under the 2026 Stock Incentive Plan as of June 30, 2026; and
- 336,116 shares of common stock reserved for future issuance on a pro forma basis under the 2026 Employee Stock Purchase Plan as of June 30, 2026.

Except as otherwise indicated, all information in this prospectus supplement assumes:

- no exercise of outstanding options, warrants or pre-funded warrants after June 30, 2026;
- no exercise of the pre-funded warrants offered and sold in this offering; and
- no exercise of the underwriters' option to purchase additional shares of our common stock.

Up to \$50.0 million of shares of our common stock were available for sale under the Amended and Restated Sales Agreement (the "Amended and Restated Sales Agreement") that we entered into on August 13, 2026 with TD Securities (USA) LLC, as sales agent. As of the date of this prospectus supplement, we have not sold any shares of our common stock under the Amended and Restated Sales Agreement. We have agreed not to make any sales under the Amended and Restated Sales Agreement prior to 30 days from the date of this prospectus supplement unless the underwriters have exercised their option to purchase additional shares in full and all such additional shares have been issued.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before you decide to invest in our securities, you should consider carefully the risks described below, as well as the risks set forth under the section titled “Risk Factors” in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2026, which is incorporated by reference herein. You should also refer to the other information contained in this prospectus supplement, the accompanying prospectus, any related free writing prospectus and the documents incorporated by reference herein, including our consolidated financial statements and the related notes and the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in our [Quarterly Report on Form 10-Q for the quarter ended June 30, 2026](#) and [Current Report on Form 8-K/A filed with the SEC on August 13, 2026](#). We believe these risks are the risks that are material to us as of the date of this prospectus supplement. If any of these risks actually occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to This Offering

The price of our stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock has fluctuated, and is likely to continue to fluctuate substantially in response to various factors, some of which are beyond our control, including the factors discussed in this “Risk Factors” section and elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein. The realization of any of these factors could have a dramatic and adverse impact on the market price of our common stock.

In addition, the stock market in general, and the market for biotechnology and biopharmaceutical companies in particular, have historically been particularly volatile and experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. If the market price of our common stock does not exceed the price at which you purchase your shares, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company’s securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management’s attention and resources, which would materially adversely affect our business, financial condition and results of operations.

If you purchase shares of our common stock in this offering, or pre-funded warrants in lieu thereof, you will incur immediate and substantial dilution and may experience additional dilution in the future.

You will suffer immediate and substantial dilution with respect to the common stock or the shares of common stock underlying the pre-funded warrants you purchase in this offering. If you purchase common stock (or pre-funded warrants in lieu thereof) in this offering at the public offering price of \$ per share (or \$ per pre-funded warrant in lieu thereof), and assuming that the underwriters do not exercise their option to purchase additional shares of common stock in this offering, you will incur immediate and substantial dilution of \$ per share, representing the difference between the public offering price of \$ per share and our pro forma net tangible book value per share as of June 30, 2026. See the section titled “Dilution” for a more detailed description of the dilution to new investors in this offering. In addition, to the extent that the pre-funded warrants issued in this offering are exercised, stock options are exercised, restricted stock units vest and settle or we raise additional funds by issuing equity securities, you will experience further dilution.

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

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

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

Until holders of the pre-funded warrants acquire shares of our common stock upon exercise of such pre-funded warrants, the holders will have no rights with respect to the shares of our common stock underlying such pre-funded warrants, such as voting rights or the rights to receive dividends. Upon exercise of the pre-funded warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise.

We will not receive significant additional funds upon the exercise of the pre-funded warrants being offered.

In certain limited circumstances, each pre-funded warrant may be exercised by way of a cashless exercise, meaning that the holder may not pay a cash purchase price upon exercise, but instead would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrant. Accordingly, we may not receive any additional funds upon the cashless exercise of the pre-funded warrants or if the pre-funded warrants altogether are not exercised at all. In addition, the pre-funded warrants have an exercise price of \$0.0001 per share of common stock, and as a result we will not receive significant additional funds upon their exercise even if not a cashless exercise.

Significant holders or beneficial owners of our common stock may not be permitted to exercise pre-funded warrants that they hold.

Holders of the pre-funded warrants will not be entitled to exercise any portion of any pre-funded warrant which, upon giving effect to such exercise, would cause the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed a specified percentage of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. As a result, you may not be able to exercise your pre-funded warrants for shares of our common stock at a time when it would be financially beneficial for you to do so. In such circumstances, you could seek to sell your pre-funded warrants to realize value, but you may be unable to do so in the absence of an established trading market for the pre-funded warrants.

If we do not maintain a current and effective registration statement relating to the shares of common stock issuable upon exercise of the pre-funded warrants, holders will only be able to exercise such pre-funded warrants on a “cashless basis.”

If we do not maintain a current and effective registration statement relating to the shares of common stock issuable upon exercise of the pre-funded warrants at the time that holders wish to exercise such pre-funded warrants, they will only be able to exercise them on a “cashless basis,” provided that an exemption from registration is available. As a result, the number of shares of common stock that holders will receive upon exercise of the pre-funded warrants will be fewer than it would have been had such holders exercised their warrants for cash, and holders may be limited in their ability to immediately sell shares upon exercise, subject to volume or other securities law limitations. Further, if an exemption from registration is not available, holders would not be able to exercise on a cashless basis and would only be able to exercise their pre-funded warrants for cash if a current and effective registration statement relating to the shares of common stock issuable upon exercise of the pre-funded warrants is available.

A sale of a substantial number of shares of our common stock, including any shares issuable upon exercise of any pre-funded warrants, may cause the price of our common stock to decline.

We cannot predict what effect, if any, future sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. However, future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of any pre-funded warrants issued in this offering or option awards or shares sold pursuant to the Amended and Restated Sales Agreement, or the perception that such sales may occur, could adversely affect the market price of our common stock. We also expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. These sales,

or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

Participation in this offering by certain of our existing stockholders and their affiliated entities may reduce the public float for our common stock.

If any of our existing stockholders and their affiliated entities purchase shares of our common stock in this offering, such purchases would reduce the available public float of our common stock because such purchasers would be restricted from selling such shares during the 60-day period following this offering and thereafter would be subject to volume limitations pursuant to restrictions under applicable securities laws. As a result, any purchase of shares of our common stock by our existing stockholders and their affiliated entities in this offering will reduce the liquidity of our common stock relative to what it would have been had these shares been purchased by investors that were not our stockholders.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering, including for the purposes described in the section titled “Use of Proceeds,” and you will be relying on the judgment of our management regarding the application of these proceeds. You will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. Our management might not apply the proceeds in ways that ultimately increase or maintain the value of your investment. If we do not invest or apply the proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus and the information incorporated by reference herein and therein contain “forward-looking statements” within the meaning of the federal securities laws, which statements are subject to substantial risks and uncertainties and are based on estimates and assumptions. All statements, other than statements of historical facts, included in this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein, including, without limitation, statements concerning our plans, objectives, goals, expectations, hopes, beliefs, intentions, assumptions, projections, estimates or strategies and any underlying assumptions regarding the future, our future results of operations and financial position, and other information referred to under the sections titled “Prospectus Supplement Summary” and “Risk Factors” in this prospectus supplement and the sections titled “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our [Quarterly Report on Form 10-Q for the quarter ended June 30, 2026](#), which is incorporated by reference herein, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “aim,” “may,” “might,” “will,” “would,” “shall,” “objective,” “intend,” “target,” “should,” “could,” “can,” “expect,” “anticipate,” “believe,” “design,” “estimate,” “forecast,” “predict,” “project,” “potential,” “possible,” “plan,” “seek,” “contemplate,” “goal,” “likely” or “continue” or the negative of these terms and similar expressions intended to identify forward-looking statements, but the absence of these terms does not mean that a statement is not forward-looking. Forward-looking statements are not historical facts and are based on our current expectations and beliefs with respect to future events and their potential effects and impacts. There can be no assurance that future events affecting us will be those that have been anticipated. Given the significant risks and uncertainties, you should not place undue reliance on these forward-looking statements.

There are a number of risks, uncertainties and other factors that could cause our actual results or outcomes, or the timing of our results or outcomes, to differ materially from the forward-looking statements expressed or implied in this prospectus supplement and the accompanying prospectus. Such risks, uncertainties and other factors include, among others, the following:

- our ability to successfully execute on our strategy for the development of YB-101;
- the success, cost and timing of our planned filing of investigational drug applications or their equivalents, planned product development activities, and initiation of clinical trials of our current product candidates, including YB-101, and any future product candidates;
- our ability to retain the continued service of our directors, officers, key employees and consultants;
- our ability to continue to grow and manage our growth effectively;
- our ability to obtain regulatory approval for our current or future product candidates that we may identify or develop;
- our ability to ensure adequate supply of our current or future product candidates;
- our ability to maintain third-party relationships necessary to conduct our business;
- our ability to establish an adequate safety or efficacy profile for our current or future product candidates that we may pursue;
- the implementation and execution of our strategic plans for our business, our current or future product candidates we may develop and our technology;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- the rate and degree of market acceptance and clinical utility for our current or future product candidates we may develop;
- our estimates about the size of our market opportunity;
- our estimates of expenses, future revenues, capital requirements and our needs for additional financing;
- our ability to maintain and establish collaborations;

- our financial performance and liquidity;
- developments relating to our competitors and our industry, including the impact of government regulation;
- our ability to retain the continued service of our key professionals and consultants and to identify, hire and retain additional qualified professionals;
- our ability to maintain adequate internal controls over financial reporting;
- the effects of global economic uncertainty and financial market volatility caused by economic effects of volatility in inflation and interest rates, tariffs, geopolitical instability, changes in international trade relationships and conflicts;
- other risks and uncertainties, including those incorporated by reference under the section titled “Risk Factors”; and
- our anticipated use of our existing resources and the proceeds from this offering.

There may be other factors that may cause our actual results or outcomes, or the timing of those results or outcomes, to differ materially from the forward-looking statements expressed or implied in this prospectus supplement and the accompanying prospectus, including factors disclosed in the section titled “Risk Factors” included in this prospectus supplement and the accompanying prospectus and the sections titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2026 and Current Report on Form 8-K/A filed with the SEC on August 13, 2026. You should evaluate all forward-looking statements made in this prospectus supplement and the accompanying prospectus in the context of these risks and uncertainties.

We caution you that the risks, uncertainties and other factors referred to above and elsewhere in this prospectus supplement and the accompanying prospectus and in the documents incorporated by reference herein may not contain all of the risks, uncertainties and other factors that may affect us, our future results, operations and outcomes. Moreover, new risks emerge from time to time. It is not possible for us to predict all risks. In addition, we cannot assure you that we will realize the results, benefits or developments that we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our business in the way expected. Past performance is not indicative of future performance.

Any forward-looking statements in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein apply only as of the date made and are expressly qualified in their entirety by the cautionary statements included in this prospectus supplement. Except as required by law, we disclaim any intent to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changes in assumptions or otherwise.

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

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$ million (or approximately \$ million if the underwriters' option to purchase additional shares is exercised in full) from the sale of the shares of common stock and pre-funded warrants offered by us in this offering, based on the public offering price of \$ per share of common stock and \$ per pre-funded warrant (which equals the price per share at which the shares of our common stock are being sold to the public in this offering, minus \$0.0001 per share of common stock), after deducting the underwriting discounts and commissions and estimated offering expenses and advisory fees payable by us, and excluding the proceeds, if any, from the exercise of the pre-funded warrants sold in this offering.

We intend to use the net proceeds of this offering, together with our existing cash, cash equivalents and investments, to fund research and development expenses for our pipeline and general corporate purposes, which may include working capital, capital expenditures and other general corporate purposes. We may use a portion of the proceeds to license, acquire or invest in new product candidates or for drug development activities related to such product candidates, complementary businesses, technology or assets; however, we have no current commitments to do so. The amount and timing of our actual expenditures will depend on numerous factors. As a result, our management will have broad discretion over the use of the proceeds from this offering. We expect the net proceeds from this offering, combined with our existing cash, cash equivalents and investments, to fund operations into 2030, including completion of our Phase 2b GD trial and preparatory work for our next planned TED study.

Our expected use of proceeds from this offering represents our current intentions based on our present plans and business condition. As of the date of this prospectus supplement, we cannot predict with certainty all of the particular uses for the proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above.

Such amount will not be sufficient for us to fund our product candidate through regulatory approval and commercialization, and we will need to raise substantial additional capital in order to do so. Until we achieve profitability, we plan to fund our operations and capital expenditures with cash on hand and expect to seek to raise any necessary additional capital through private or public equity or debt financings, loans or other capital sources, which could include income from collaborations, partnerships or other marketing, distribution, licensing or other strategic arrangements with third parties, or from grants.

Pending the use of the net proceeds from this offering, we intend to invest the proceeds in a variety of capital preservation investments, including interest-bearing, investment-grade securities, certificates of deposit or government securities.

DILUTION

If you invest in our common stock in this offering (or pre-funded warrants in lieu thereof), your ownership interest will be immediately diluted to the extent of the difference between the public offering price per share of our common stock (or pre-funded warrant in lieu thereof) and the unaudited pro forma net tangible book value per share of common stock immediately after this offering.

Our pro forma net tangible book value as of June 30, 2026 (which gives effect to the Merger and combines the historical balance sheets of Pre-Merger VYNE and Pre-Merger Yarrow as if the Merger had been consummated as of such date) was \$111.9 million, or \$39.92 per share of common stock. Our pro forma net tangible book value is the amount of our pro forma total tangible assets less our pro forma total liabilities. Pro forma net tangible book value per share of common stock represents pro forma net tangible book value divided by the total number of pro forma shares of our common stock outstanding as of June 30, 2026.

After giving effect to our issuance and sale of shares of our common stock and pre-funded warrants in this offering at the public offering price of \$ per share and \$ per pre-funded warrant (which equals the price per share at which the shares of our common stock are being sold to the public in this offering, minus \$0.0001 per share of common stock), and after deducting the underwriting discounts and commissions and estimated offering expenses and advisory fees payable by us, our as adjusted pro forma net tangible book value as of June 30, 2026 would have been \$ million, or \$ per share of common stock. This represents an immediate increase in as adjusted pro forma net tangible book value per share of \$ to existing stockholders and immediate dilution of \$ in as adjusted pro forma net tangible book value per share to new investors purchasing shares of common stock in this offering. Dilution per share to new investors is determined by subtracting as adjusted pro forma net tangible book value per share of common stock after this offering from the public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Public offering price per share	\$
Pro forma net tangible book value per share as of June 30, 2026	\$39.92
Increase in pro forma net tangible book value per share attributable to this offering	\$
As adjusted pro forma net tangible book value per share immediately after this offering	\$
Dilution in pro forma net tangible book value per share to new investors in this offering	\$

The dilution information discussed above assumes no exercise of the pre-funded warrants sold in this offering and is illustrative only. Investors who receive shares of our common stock upon the exercise of the pre-funded warrants offered hereby may experience additional dilution depending on our net tangible book value at the time of exercise.

If the underwriters exercise in full their option to purchase additional shares, our as adjusted pro forma net tangible book value per share after this offering would be \$, representing an immediate increase in as adjusted pro forma net tangible book value per share of \$ to existing stockholders and immediate dilution in as adjusted pro forma net tangible book value per share of \$ to new investors purchasing shares of common stock in this offering at the public offering price of \$ per share, and after deducting the underwriting discounts and commissions and estimated offering expenses and advisory fees payable by us.

The foregoing tables and calculations are based on 2,803,078 shares of our pro forma common stock outstanding as of June 30, 2026 (which gives effect to the Merger and combines the historical balance sheets of Pre-Merger VYNE and Pre-Merger Yarrow as if the Merger had been consummated as of such date) and exclude:

- 2,002,282 shares of common stock issuable on a pro forma basis upon the exercise of stock options outstanding as of June 30, 2026, at a weighted-average exercise price of \$6.19 per share;
- 25,781,240 shares of common stock issuable on a pro forma basis upon the exercise of pre-funded warrants outstanding as of June 30, 2026, at a weighted-average exercise price of \$0.0001 per share;

- 2,688,931 shares of common stock reserved for future issuance on a pro forma basis under the 2026 Stock Incentive Plan as of June 30, 2026; and
- 336,116 shares of common stock reserved for future issuance on a pro forma basis under the 2026 Employee Stock Purchase Plan as of June 30, 2026.

To the extent that any options are exercised or we otherwise issue additional shares of common stock or securities convertible into shares of our common stock in the future, there will be further dilution to new investors.

DESCRIPTION OF SECURITIES WE ARE OFFERING

Common Stock

We are offering shares of our common stock in this offering. See the section titled “Description of Securities” in the accompanying prospectus for more information regarding our shares of common stock.

Pre-funded Warrants

The following is a summary of the material attributes and characteristics of the pre-funded warrants. The form of pre-funded warrant will be provided to the pre-funded warrant purchasers in this offering and will be filed as an exhibit to a Current Report on Form 8-K filed in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement forms a part. The following summary is subject in all respects to the provisions contained in the pre-funded warrants.

Pre-funded warrants will be issued in certificated form only.

Duration and Exercise Price. Each pre-funded warrant entitles the holder thereof to purchase shares of our common stock at an exercise price equal to \$0.0001 per share. Each pre-funded warrant will be exercisable at any time beginning on the date of issuance. The number of shares of our common stock issuable upon exercise of each pre-funded warrant is subject to adjustment in the event of stock dividends, stock splits or similar events affecting our common stock.

Exercisability. The holder of the pre-funded warrant may exercise the pre-funded warrant by delivering an exercise notice, completed and duly signed, and payment in cash of the exercise price for the number of shares of our common stock for which the pre-funded warrant is being exercised. The holder of the pre-funded warrant may also satisfy its obligation to pay the exercise price through a “cashless exercise,” in which the holder receives the net value of the pre-funded warrant in shares of common stock determined according to the formula set forth in the pre-funded warrant.

Upon a holder’s exercise of the pre-funded warrant, we will issue the shares of common stock to which the holder is entitled pursuant to such exercise within the number of trading days comprising the standard settlement period after the exercise date.

A holder of the pre-funded warrant will not be entitled to exercise any portion of such pre-funded warrant that, upon giving effect to such exercise, would cause the aggregate number of shares of our common stock beneficially owned by such holder (together with its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder for purposes of Section 13(d) of the Exchange Act) to exceed 4.99%, 9.99% or 19.99%, at the election of the holder, of the total number of then issued and outstanding shares of common stock, as such percentage ownership is determined in accordance with the terms of the pre-funded warrant and subject to such holder’s rights under the pre-funded warrant to increase or decrease such percentage to any other percentage not in excess of 19.99% upon notice from such holder to us, provided that any such increase will not be effective until the 61st day after such notice.

Fundamental Transaction. In the event of any fundamental transaction, as described in the pre-funded warrants and generally including any merger with or into another entity, sale of all or substantially all of our and our subsidiaries’ assets (taken as a whole), tender offer or exchange offer, or reclassification of our shares of common stock, then upon any subsequent exercise of a pre-funded warrant, the holder will have the right to receive as alternative consideration, for each share of common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the same amount and kind of consideration receivable upon or as a result of such transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such event.

Transferability. Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer as described in the pre-funded warrants and payment of funds sufficient to pay any transfer taxes (if applicable).

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

We will initially serve as the warrant agent under the pre-funded warrants.

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

U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following discussion is a summary of the material U.S. federal income tax considerations to U.S. Holders and Non-U.S. Holders (each as defined below) of the ownership and disposition of the common stock and pre-funded warrants issued pursuant to this offering. The discussion does not purport to be a complete analysis of all potential tax considerations. The considerations of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws, are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations promulgated under the Code, judicial decisions and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the “IRS”), in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a holder of our common stock or pre-funded warrants. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax considerations of the ownership and disposition of our common stock or pre-funded warrants.

This discussion is limited to holders that hold our common stock or pre-funded warrants as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax considerations relevant to such holder’s particular circumstances, including without limitation the alternative minimum tax and the effect of the Medicare contribution tax on net investment income. In addition, it does not address considerations relevant to holders who are subject to special rules, including, without limitation:

- former citizens or long-term residents of the United States;
- persons holding our common stock or pre-funded warrants as part of a hedge, straddle or other risk-reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies or other financial institutions;
- real estate investment trusts or regulated investment companies;
- brokers, dealers or traders in currencies or securities, or other persons that elect to use a mark-to-market method of accounting for their holdings in our common stock or pre-funded warrants;
- “controlled foreign corporations,” “foreign controlled foreign corporations,” “passive foreign investment companies” and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements classified as partnerships or disregarded entities for U.S. federal income tax purposes (and investors therein), S corporations or other passthrough entities (including hybrid entities);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our common stock or pre-funded warrants under the constructive sale provisions of the Code;
- persons who hold or receive our common stock or pre-funded warrants pursuant to the exercise of any employee stock option or otherwise as compensation;
- tax-qualified retirement plans;
- persons that acquire our common stock or pre-funded warrants as compensation for services;
- persons that own, or have owned, actually or constructively, 5% or more (by vote or value) of our common stock and/or pre-funded warrants; and
- pension plans or funds, or an entity that is wholly owned by a pension plan or fund, including “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

If an entity or arrangement classified as a partnership for U.S. federal income tax purposes holds our common stock or pre-funded warrants, the tax treatment of a partner in the partnership will depend on the

status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, each partnership and each partner in such partnership holding our common stock or pre-funded warrants is urged to consult its tax advisor regarding the U.S. federal income tax considerations to it of the ownership and disposition of our common stock or pre-funded warrants.

For purposes of this discussion, a “U.S. Holder” is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity treated as a corporation for U.S. federal income tax purposes, created in or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a U.S. court and the control of one or more “United States persons” (within the meaning of Section 7701(a)(30) of the Code), or (ii) has a valid election in effect to be treated as a U.S. person for U.S. federal income tax purposes.

For purposes of this discussion, a “Non-U.S. Holder” is any beneficial owner of our common stock or pre-funded warrants that is neither a U.S. Holder nor an entity or arrangement classified as a partnership.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. EACH INVESTOR IS URGED TO CONSULT ITS TAX ADVISOR WITH RESPECT TO THE APPLICATION OF U.S. FEDERAL INCOME TAX LAWS TO ITS PARTICULAR SITUATION AS WELL AS ANY TAX CONSIDERATIONS OF THE OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK OR PRE-FUNDED WARRANTS ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, because the exercise price of the pre-funded warrants is a nominal amount, the pre-funded warrants generally are expected to be treated as shares of our common stock for U.S. federal income tax purposes (and a holder is expected to be subject to the same tax considerations as if the holder held shares of our common stock as discussed below). Accordingly, no gain or loss should be recognized upon exercise of a pre-funded warrant, and the holding period of the shares of our common stock received upon exercise of a pre-funded warrant should include the holding period of the pre-funded warrant. Similarly, the tax basis of the pre-funded warrant should carry over to the shares of common stock received upon exercise, increased by the exercise price. Each U.S. Holder and Non-U.S. Holder is urged to consult its tax advisor regarding the U.S. federal income tax considerations to it of the ownership and disposition of the pre-funded warrants.

U.S. Holders

Distributions on Common Stock

We have no present intention to pay cash dividends on our common stock. However, if we do make distributions of cash or other property on our common stock (other than certain distributions of our common stock), those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If the amount of such distributions exceeds our current and accumulated earnings and profits, such excess generally will constitute a non-taxable return of capital and will first be applied against and reduce, but not below zero, a U.S. Holder’s adjusted tax basis in our common stock. Any excess will be treated as capital gain and will be treated as described below under the subsection titled “— U.S. Holders — Sale or Other Taxable Disposition of Common Stock or Pre-Funded Warrants.”

Dividends paid to a U.S. Holder of our common stock that is a corporation for U.S. federal income tax purposes generally will qualify for the dividends received deduction if the requirements relating to the requisite holding period are satisfied. With certain exceptions, and provided certain holding period

requirements are met, dividends we pay to a non-corporate U.S. Holder generally will constitute “qualified dividends” that currently are subject to tax at preferential long-term capital gains rates.

Sale or Other Taxable Disposition of Common Stock or Pre-Funded Warrants

Upon a sale or other taxable disposition of our common stock or pre-funded warrants, a U.S. Holder generally will recognize taxable gain or loss in an amount equal to the difference between (1) the amount realized upon such sale or other taxable disposition and (2) the U.S. Holder’s tax basis in the common stock or pre-funded warrant. Such gain or loss generally will be treated as long-term capital gain or loss if the common stock or pre-funded warrant is held by the U.S. Holder for more than one year at the time of such sale or other taxable disposition.

Information Reporting and Backup Withholding

Information reporting requirements may apply to dividends paid to a U.S. Holder and to the proceeds of the sale or other taxable disposition of our common stock or pre-funded warrants, unless the U.S. Holder is an exempt recipient. Backup withholding may apply to such payments if the U.S. Holder fails to provide a taxpayer identification number or a certification of exempt status or has been notified by the IRS that it is subject to backup withholding (and such notification has not been withdrawn).

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a U.S. Holder’s U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Non-U.S. Holders

Distributions on Common Stock

We have no present intention to pay cash dividends on our common stock. However, if we do make distributions of cash or other property on our common stock (other than certain distributions of our common stock), those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If the amount of such distributions exceeds our current and accumulated earnings and profits, such excess generally will constitute a non-taxable return of capital and will first be applied against and reduce, but not below zero, a Non-U.S. Holder’s adjusted tax basis in our common stock. Any excess will be treated as capital gain and will be treated as described below under the subsection titled “— Non-U.S. Holders — Sale or Other Taxable Disposition of Common Stock or Pre-Funded Warrants.”

Dividends paid to a Non-U.S. Holder of our common stock that is not effectively connected with such Non-U.S. Holder’s conduct of a trade or business in the United States generally will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided such Non-U.S. Holder furnishes the applicable withholding agent with documentation required to claim benefits under such tax treaty (generally, a valid IRS Form W-8BEN or W-8BEN-E or a successor form)). These certifications must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. Each Non-U.S. Holder is urged to consult its tax advisor regarding U.S. federal withholding tax on distributions on our common stock, including such Non-U.S. Holder’s eligibility for benefits under any applicable income tax treaties and the availability of a refund on any excess U.S. federal tax withheld.

If dividends paid to a Non-U.S. Holder are effectively connected with such Non-U.S. Holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, such Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), such Non-U.S. Holder generally will be exempt from the U.S. federal withholding tax described above. To claim the exemption, a Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI (or a successor form) certifying that the dividends are effectively connected with such Non-U.S. Holder’s conduct of a trade or business within the United States. In general, any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates applicable to a U.S. person, unless a specific treaty exemption applies. A Non-U.S. Holder that is a corporation

also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Each Non-U.S. Holder is urged to consult its tax advisor regarding the U.S. federal income tax considerations of any distributions with respect to our common stock, including any applicable tax treaties that may provide for different rules.

Sale or Other Taxable Disposition of Common Stock or Pre-Funded Warrants

A Non-U.S. Holder generally will not be subject to U.S. federal income or withholding tax on any gain realized upon the sale or other taxable disposition of our common stock or pre-funded warrants unless:

- the gain is effectively connected with such Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment or fixed base in the United States to which such gain is attributable);
- such Non-U.S. Holder is a non-resident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock or pre-funded warrants constitute a U.S. real property interest ("USRPI") by reason of our status as a U.S. real property holding corporation ("USRPHC") for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular rates applicable to U.S. persons, unless a specific treaty exemption applies. A Non-U.S. Holder that is a corporation also may be subject to a "branch profits tax" at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above generally will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by certain U.S.-source capital losses of a Non-U.S. Holder, provided such Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and we do not anticipate becoming, a USRPHC. However, we cannot assure you that we will not become a USRPHC. Even if we are or were to become a USRPHC, however, our common stock will not be treated as a USRPI with respect to a Non-U.S. Holder if our common stock is "regularly traded" on an "established securities market" (as such terms are defined by applicable Treasury Regulations) and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the 5-year period ending on the date of the sale or other taxable disposition or such Non-U.S. Holder's holding period. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above. Non-U.S. Holders of pre-funded warrants should consult their tax advisors regarding the application of these rules with respect to the pre-funded warrants.

Each Non-U.S. Holder is urged to consult its tax advisor regarding the U.S. federal income tax considerations of the sale or other taxable disposition of our common stock or pre-funded warrants, including any applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Payments of dividends on our common stock generally will not be subject to backup withholding provided the applicable withholding agent does not have actual knowledge or reason to know the Non-U.S. Holder is a U.S. person and the Non-U.S. Holder certifies its non-U.S. status by furnishing a valid IRS Form W-8BEN, W-8BEN-E, W-8ECI, W-8EXP or other applicable IRS form, or otherwise establishes an exemption. Information returns are required to be filed with the IRS in connection with any distributions on our common stock paid to the Non-U.S. Holder, regardless of whether any tax was actually withheld. Copies of these information returns may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Information reporting and, depending on the circumstances, backup withholding (at a current rate of 24%) generally will apply to the proceeds of the sale or other taxable disposition of our common stock or pre-funded warrants within the United States or conducted through certain U.S.-related brokers, unless the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that the Non-U.S. Holder is a U.S. person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock or pre-funded warrants conducted through a non-U.S. office of a non-U.S. broker that does not have certain enumerated relationships with the United States generally will not be subject to backup withholding or information reporting.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code and the rules and regulations promulgated thereunder (commonly referred to as "FATCA") on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless: (i) the foreign financial institution undertakes certain diligence, reporting and withholding obligations; (ii) the non-financial foreign entity either certifies it does not have any "substantial U.S. owners" (as defined in the Code) or furnishes identifying information regarding each substantial U.S. owner; or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence, reporting and withholding requirements in clause (i) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified U.S. persons" or "United States owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to noncompliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States concerning FATCA may be subject to different rules. If a dividend payment is both subject to withholding under FATCA and subject to the withholding tax discussed above under the section titled "—Non-U.S. Holders — Distributions on Common Stock," the withholding under FATCA may be credited against, and therefore reduce, such other withholding tax.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock or pre-funded warrants.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated _____, among us and Jefferies LLC, TD Securities (USA) LLC and Guggenheim Securities, LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock and pre-funded warrants shown opposite its name below:

UNDERWRITER	NUMBER OF SHARES	NUMBER OF PRE-FUNDED WARRANTS
Jefferies LLC		
TD Securities (USA) LLC		
Guggenheim Securities, LLC		
LifeSci Capital LLC		
Total		

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock and pre-funded warrants if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock and pre-funded warrants subject to their acceptance of the shares of common stock and pre-funded warrants from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. The underwriters have not been engaged to act as warrant agent for the pre-funded warrants or to act as underwriter or agent or otherwise participate in the issuance of the shares of our common stock upon the exercise of the pre-funded warrants.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock and pre-funded warrants at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ _____ per share of common stock and pre-funded warrant. After the offering, the public offering price and concession to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus supplement.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share	Per Pre-Funded Warrant	Total Without Option to Purchase Additional Shares	Total With Option to Purchase Additional Shares
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$. Certain expenses payable by us in connection with this offering may be reimbursed by the underwriters. We have agreed to reimburse the underwriters for certain of their expenses.

Listing

Our common stock is listed on The Nasdaq Capital Market under the trading symbol “YARW.” There is no established public trading market for the pre-funded warrants, and we do not expect a trading market to develop. We do not intend to list the pre-funded warrants on any securities exchange or nationally recognized trading system, including The Nasdaq Capital Market. Without a trading market, the liquidity of the pre-funded warrants will be extremely limited.

Stamp Taxes

If you purchase shares of common stock or pre-funded warrants offered in this prospectus supplement, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus supplement.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter’s initial purchase commitment as indicated in the table above.

No Sales of Similar Securities

We, our officers and directors have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open “put equivalent position” within the meaning of Rule 16a-1(h) under the Exchange Act, or
- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing for a period of 60 days after the date of this prospectus supplement without the prior written consent of Jefferies LLC and TD Securities (USA) LLC.

This restriction terminates after the close of trading of the common stock on and including the 60th day after the date of this prospectus supplement. Notwithstanding the foregoing, the securityholder may transfer shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock:

- by bona fide gift, or by will or intestate succession to a family member or to a trust whose beneficiaries consist exclusively of one or more of the securityholder and/or a family member;

- ii. pursuant to a court order in respect of, or by operation of law as a result of, a divorce;
- iii. if the securityholder is not an individual, to any affiliate of the securityholder, or to the limited partners, general partners, limited liability company members, trust beneficiaries or stockholders of the securityholder, in each case if such transfer is not for value;
- iv. transactions relating to shares of common stock acquired in this offering or in open market transactions after the completion of this offering;
- v. to us upon the exercise of options or warrants or the vesting of restricted stock units, in each case to cover tax withholding obligations in connection with such exercise or vesting or for the primary purpose of paying the exercise price of options or warrants to acquire shares of common stock, pursuant to a stock option, stock bonus or other stock plan or arrangement, or warrants, existing as of the date of the lock-up agreement or described in this prospectus supplement, provided that any shares of common stock acquired upon such exercise or vesting will remain subject to the lock-up agreement and that, if the securityholder is required to file a report under the Exchange Act relating thereto, such report will include a statement to the effect that the filing relates to the “net” or “cashless” exercise of options to purchase shares of common stock, including, if applicable, the payment of taxes due as a result of the exercise of options or vesting of restricted stock units; and
- vi. pursuant to a bona fide third-party offer for all or substantially all of our outstanding voting stock, whether pursuant to a merger, tender offer or otherwise, to a third party or group of third parties, including by entering into any voting, support or tender agreement with respect thereto, provided that if such merger, tender offer or other transaction is not consummated, the securityholder’s shares of common stock and other securities subject to the lock-up agreement will remain subject to the restrictions set forth in the lock-up agreement;

provided that, in the case of (a) clauses (i) through (iii), any such transferee executes and delivers to the representatives a lock-up agreement; (b) clause (ii), that prior to the expiration of the lock-up period, no public disclosure or filing under the Exchange Act by any party to the transfer shall be required, or made voluntarily, reporting a reduction in beneficial ownership of shares of common stock, in connection with such transfer and (c) clauses (i), (iii) and (iv), that prior to the expiration of the lock-up period, (x) no public disclosure or filing under the Exchange Act by any party to the transfer shall be made voluntarily reporting a reduction in beneficial ownership of shares of common stock in connection with such transfer and (y) any such public disclosure or filing required to be made shall include a statement describing the circumstances of such transfer and, in the case of clauses (i) and (iii), that the transferee has agreed to be bound by the terms of the lock-up agreement.

In addition, the foregoing restrictions shall not apply to the establishment or amendment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act (a “10b5-1 Plan”); *provided that* no sales or other dispositions of a securityholder’s shares of common stock or other securities exchangeable or exercisable for or convertible into shares of common stock may occur under such 10b5-1 Plan during the lock-up period, no public announcement or filing under the Exchange Act regarding the establishment of such 10b5-1 Plan during the lock-up period shall be voluntarily made by or on behalf of the securityholder or us, and any public announcement or filing under the Exchange Act required of the securityholder or us regarding the establishment of such 10b5-1 Plan during the lock-up period shall include a statement to the effect that no transfer of shares of common stock may be made under such 10b5-1 Plan during the lock-up period.

Further, notwithstanding the foregoing, we are permitted to sell shares of our common stock under the Amended and Restated Sales Agreement with TD Securities (USA) LLC during the restricted period following the exercise in full or expiration of the underwriters’ option to purchase additional shares.

Jefferies LLC and TD Securities (USA) LLC may, in their sole discretion and at any time or from time to time before the termination of the 60-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Exchange Act, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either “covered” short sales or “naked” short sales.

“Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

“Naked” short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter’s purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on The Nasdaq Capital Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker’s bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus supplement in electronic format may be made available by e-mail or on the web sites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than this prospectus supplement and the accompanying prospectus in electronic format, the information on the underwriters’ web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus supplement and

the accompanying prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their respective affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses. For example, on August 13, 2026, we entered into the Amended and Restated Sales Agreement with TD Securities (USA) LLC pursuant to which we may offer and sell shares of our common stock from time to time through TD Securities (USA) LLC acting as our sales agent.

In the ordinary course of their various business activities, the underwriters and certain of their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the securities offered hereby. Any such short positions could adversely affect future trading prices of the securities offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Disclaimers About Non-U.S. Jurisdictions

Canada

(A) Resale Restrictions

The distribution of securities in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the securities in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

(B) Representations of Canadian Purchasers

By purchasing securities in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the securities without the benefit of a prospectus qualified under those securities laws as it is an “accredited investor” as defined under National Instrument 45-106 — Prospectus Exemptions or Section 73.3(1) of the Securities Act (Ontario), as applicable,
- the purchaser is a “permitted client” as defined in National Instrument 31-103 — Registration Requirements, Exemptions and Ongoing Registrant Obligations,
- where required by law, the purchaser is purchasing as principal and not as agent, and

- the purchaser has reviewed the text above under Resale Restrictions.

(C) Conflicts of Interest

Canadian purchasers are hereby notified that certain of the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 — Underwriting Conflicts from having to provide certain conflict of interest disclosure in this prospectus supplement.

(D) Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the prospectus (including any amendment thereto) such as this prospectus supplement contains a misrepresentation, *provided that* the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

(E) Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

(F) Taxation and Eligibility for Investment

Canadian purchasers of securities should consult their own legal and tax advisors with respect to the tax consequences of an investment in the securities in their particular circumstances and about the eligibility of the securities for investment by the purchaser under relevant Canadian legislation.

(G) Language of Documents

The purchaser confirms its express wish and that it has requested that this document, all documents evidencing or relating to the sale of the securities described herein and all other related documents be drawn up exclusively in the English language. *L'acquéreur confirme sa volonté expresse et qu'il a demandé que le présent document, tous les documents attestant de la vente des titres décrits dans le présent document ou s'y rapportant ainsi que tous les autres documents s'y rattachant soient rédigés exclusivement en langue anglaise.*

Australia

This prospectus supplement is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia (the "Corporations Act"), has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus supplement in Australia:

You confirm and warrant that you are either:

- a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;
- a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us, which complies with the requirements of section 708(8)(c) (i) or (ii) of the Corporations Act and related regulations before the offer has been made;
- a person associated with the us under Section 708(12) of the Corporations Act; or
- a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

European Economic Area

In relation to each Member State of the European Economic Area (each, a “Relevant State”), no securities have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the securities which have been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the securities may be offered to the public in that Relevant State at any time.

- (a) to any qualified investor as defined under Article 2 of the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of the securities shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation or publish an Annex IX document pursuant to Article 1(4) of the Prospectus Regulation.

For the purposes of this provision, the expression “offer to the public” in relation to the securities in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any securities to be offered so as to enable an investor to decide to purchase or subscribe for any securities, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the “SFO”), and any rules made under that Ordinance; or in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong (the “CO”), or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to the securities which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made under that Ordinance.

This prospectus supplement has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus supplement may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus supplement and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Israel

This prospectus supplement does not constitute a prospectus under the Israeli Securities Law, 5728-1968 (the “Securities Law”), and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus supplement is being distributed only to, and is directed only at, and any offer of the securities is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum (the “Addendum”), to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and “qualified individuals,” each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended) (the “FIEL”), and the underwriters will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations, and ministerial guidelines of Japan.

Singapore

This prospectus supplement has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities may not be circulated or distributed, nor may the securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the securities pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or

- (v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the “SIX”), or on any other stock exchange or regulated trading facility in Switzerland. This prospectus supplement has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus supplement nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus supplement nor any other offering or marketing material relating to the offering, the Company or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus supplement will not be filed with, and the offer of the securities will not be supervised by, the Swiss Financial Market Supervisory Authority (the “FINMA”), and the offer of the securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (the “CISA”). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of the securities.

United Kingdom

No securities have been offered or will be offered pursuant to the offering to the public in the United Kingdom except that the securities may be offered to the public in the United Kingdom at any time:

- (a) where the offer is conditional on the admission of the securities to trading on the London Stock Exchange plc’s main market (in reliance on the exception in paragraph 6(a) of Schedule 1 of the POATR);
- (b) to any qualified investor as defined under paragraph 15 of Schedule 1 of the POATR;
- (c) to fewer than 150 persons (other than qualified investors as defined under paragraph 15 of Schedule 1 of the POATR), subject to obtaining the prior consent of the representatives for any such offer; or
- (d) in any other circumstances falling within Part 1 of Schedule 1 of the POATR.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares in the United Kingdom means the communication to any person which presents sufficient information on: (a) the shares to be offered; and (b) the terms on which they are to be offered, to enable an investor to decide to buy or subscribe for the shares and the expressions “POATR” means the Public Offers and Admissions to Trading Regulations 2024.

LEGAL MATTERS

The validity of the securities offered by this prospectus supplement will be passed upon for us by Gibson, Dunn & Crutcher LLP, San Francisco, California. Latham & Watkins LLP, San Diego, California, is acting as counsel for the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements of VYNE Therapeutics Inc. (changed to Yarrow Bioscience, Inc. at time of merger) as of December 31, 2025 and 2024, and for each of the years in the two-year period ended December 31, 2025, incorporated by reference in this prospectus, have been audited by Baker Tilly US, LLP, an independent registered public accounting firm, as set forth in the report thereon, and are incorporated by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The financial statements of Yarrow Bioscience, Inc. (changed to Yarrow Bioscience Operating Company Corp. at time of merger) as of December 31, 2025 and for the period from October 3, 2025 (inception) to December 31, 2025, incorporated by reference in this prospectus, have been audited by Baker Tilly US, LLP, an independent registered public accounting firm, as set forth in the report thereon, and are incorporated by reference in reliance upon such report given on the authority of such 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 offered hereby. This prospectus supplement, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our securities, we refer you to the registration statement and its exhibits. Statements contained in this prospectus supplement concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus supplement relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The exhibits to the registration statement should be reviewed for the complete contents of these contracts and documents. A copy of the registration statement and its exhibits may be obtained from the SEC upon the payment of fees prescribed by it. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding companies that file electronically with it.

We are subject to the information and periodic and current reporting requirements of the Exchange Act, and in accordance therewith, file periodic and current reports, proxy statements and other information with the SEC. The registration statement, such periodic and current reports and other information can be obtained electronically by means of the SEC's website at www.sec.gov.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement. Information in this prospectus supplement supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement.

We incorporate by reference into this prospectus supplement and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the SEC on [February 27, 2026](#);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2026 and June 30, 2026, filed with the SEC on [May 15, 2026](#) and [August 13, 2026](#), respectively;
- our Current Reports on Form 8-K filed with the SEC on [January 30, 2026](#), [March 11, 2026](#), [July 10, 2026](#) (except for the information furnished under Item 7.01 therein and Exhibit 99.1 thereto), [July 20, 2026](#), [July 21, 2026](#) (except for the information furnished under Item 7.01 therein and Exhibit 99.1 thereto), [July 28, 2026](#) (except for the information furnished under Items 2.02 and 7.01 therein), [July 30, 2026](#), [August 13, 2026](#) (except for the information furnished under Items 2.02 and 7.01 therein) and [September 10, 2026](#); and
- the description of our common stock contained in [Exhibit 4.1](#) to our Annual Report on Form 10-K filed with the SEC on [March 14, 2023](#), including any amendments or reports filed for the purpose of updating such description.

In addition, 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 on or after the date of this prospectus supplement until the earlier of the date on which all of the securities registered have been sold hereunder or the registration statement of which this prospectus supplement is a part has been withdrawn (excluding any information furnished rather than filed) shall be deemed to be incorporated by reference into this prospectus supplement and to be a part of this prospectus supplement from the date of filing those documents.

Notwithstanding the statements in the preceding paragraphs, no document, report or exhibit (or portion of any of the foregoing) or any other information that we have “furnished” to the SEC pursuant to the Exchange Act shall be incorporated by reference into this prospectus supplement.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus supplement, including exhibits to these documents. You should direct any requests for documents to:

Yarrow Bioscience, Inc.
Attn: Corporate Secretary
470 James Street, Suite 007
New Haven, CT 06513
(203) 433-7577

You also may access these filings on our website at www.yarrowbioscience.com. We do not incorporate the information on our website into this prospectus supplement and you should not consider any information on, or that can be accessed through, our website as part of this prospectus supplement (other than those filings with the SEC that we specifically incorporate by reference into this prospectus supplement).

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus supplement will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus supplement modifies, supersedes or replaces such statement.

PROSPECTUS

\$250,000,000

**Yarrow Bioscience, Inc.****Common Stock
Preferred Stock
Warrants**

We may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, up to \$250.0 million of any combination of the securities described in this prospectus. We may also offer securities as may be issuable upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable antidilution provisions.

We will provide specific terms of any offering in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. Any prospectus supplement and any related free writing prospectus may also add, update, or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby.

These securities may be offered and sold in the same offering or in separate offerings; to or through underwriters, dealers, and agents; or directly to purchasers. The names of any underwriters, dealers, or agents involved in the sale of our securities, their compensation and any options granted to them to purchase additional shares will be described in the applicable prospectus supplement. For a more complete description of the plan of distribution of these securities, see the section entitled "Plan of Distribution" beginning on page 14 of this prospectus.

We are a "smaller reporting company" under the federal securities laws and, as such, are subject to reduced public company reporting requirements. See "Summary — Implications of Being a Smaller Reporting Company."

This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market ("Nasdaq"), under the symbol "YARW." On August 12, 2026, the closing price of our common stock was \$42.77 per share. We will provide information in any applicable prospectus supplement regarding any listing of securities other than shares of our common stock on any securities exchange. Our principal executive offices are located at 470 James Street, Suite 007, New Haven, Connecticut 06513 and our telephone number is (203) 433-7577.

Investing in our securities involves significant risks. See "Risk Factors" beginning on page 4 of this prospectus and in the applicable prospectus supplement and in the documents incorporated by reference in this prospectus and any applicable prospectus supplement before investing in any securities.

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

The date of this prospectus is August 19, 2026.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, which we refer to as the “SEC” or the “Commission,” utilizing a “shelf” registration process. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings, up to a total amount of \$250.0 million.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities pursuant to this prospectus, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The specific terms of the offered securities may vary from the general terms of the securities described in this prospectus, and accordingly the description of the securities contained in this prospectus is subject to, and qualified by reference to, the specific terms of the offered securities contained in the applicable prospectus supplement. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. You should carefully read both this prospectus, any applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the additional information described under the heading “Where You Can Find More Information” beginning on page 18 of this prospectus.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

You should rely only on the information contained in or incorporated by reference in this prospectus, any applicable prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. We take no responsibility for, and can provide no assurance as to the reliability of, any information that others may provide. This prospectus, any applicable prospectus supplement to this prospectus or any related free writing prospectus do 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 do 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 such securities in any circumstances in which such offer or solicitation is unlawful. We are not making offers to sell the securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information in this prospectus, any applicable prospectus supplement, any free writing prospectus and any information in documents that we have incorporated by reference is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

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 more 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 section titled “Where You Can Find More Information.”

Unless otherwise stated, all references in this prospectus to “we,” “us,” “our,” “the company,” “YARW,” “Yarrow” and similar designations, except where the context requires otherwise, refer collectively to Yarrow Bioscience, Inc., a Delaware corporation, together with its consolidated subsidiaries.

SUMMARY

This summary highlights selected information from this prospectus and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus and any applicable prospectus supplement, including the risks of investing in our securities discussed under the heading “Risk Factors” contained in the applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements and related notes, and the exhibits to the registration statement of which this prospectus is a part, before making your investment decision.

About Yarrow Bioscience, Inc.

We are a clinical-stage biotechnology company focused on developing transformative therapies to treat autoimmune thyroid diseases. Our lead product candidate, YB-101 (also known as GenSci098), is a humanized, monoclonal antibody targeting the thyroid-stimulating hormone receptor (“TSHR”), which we plan to develop for the treatment of Graves’ disease, or GD, and potentially thyroid eye disease (“TED”). Both GD and TED are serious and poorly treated autoimmune diseases in which autoantibodies against TSHR attack and overstimulate the receptor, leading to a wide spectrum of thyroidal and extra-thyroidal clinical sequelae.

YB-101 was designed to selectively bind to TSHR and block autoantibody-induced receptor activation, thereby directly inhibiting the pathogenic activity of thyroid-stimulating autoantibodies that drive disease progression in GD and TED as well as the biological pathway responsible for hyperthyroidism and orbitopathy. We believe that this novel and targeted approach represents a potential breakthrough for patients with GD and TED and has the potential to address an important unmet need for therapies with differentiated risk-benefit profiles.

Company Information

We were incorporated in October 2011 as a Delaware corporation under the name Tigercat Pharma, Inc. In September 2020, we changed our name from “Menlo Therapeutics Inc.” to “VYNE Therapeutics Inc.,” following our merger with Foamix Pharmaceuticals Ltd. in March 2020. In July 2026, we changed our name from “VYNE Therapeutics Inc.” to “Yarrow Bioscience, Inc.,” following our merger with Yarrow Bioscience Operating Company Corp. (formerly known as Yarrow Bioscience, Inc.).

On July 24, 2026, we effected a 1-for-50 reverse stock split of our common stock (the “Reverse Stock Split”). All references to common stock share and per share amounts in this prospectus are presented on a post-Reverse Stock Split basis.

Our principal executive offices are located at 470 James Street, Suite 007, New Haven, Connecticut 06513 and our telephone number is (203) 433-7577. Our website address is www.yarrowbioscience.com. The information contained on, or accessible through, our website is not incorporated by reference into this prospectus. We have included our website in this prospectus solely as an inactive textual reference.

We make available on or through our website certain reports and amendments to those reports that we file with, or furnish to, the SEC in accordance with the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These include our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. We make this information available on or through our website free of charge as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC.

Implications of Being a Smaller Reporting Company

We are a “smaller reporting company,” as defined in Rule 12b-2 of the Exchange Act, meaning that the market value of our shares held by non-affiliates is less than \$700 million and our annual revenue was less than \$100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our shares held by non-affiliates is less than \$250 million or

(ii) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our shares held by non-affiliates is less than \$700 million. As a smaller reporting company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation. Additionally, as a smaller reporting company, we may continue to take advantage of the exception from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended. If investors consider our common shares less attractive as a result of our election to use the scaled-back disclosure permitted for smaller reporting companies, there may be a less active trading market for our common shares and our share price may be more volatile.

The Securities We May Offer

We may offer shares of our common stock and preferred stock, and warrants to purchase any of such securities, up to a total aggregate offering price of \$250.0 million from time to time in one or more offerings under this prospectus, together with any applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of the relevant offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate offering price;
- conversion or exchange prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;
- voting or other rights, if any; and
- material U.S. federal income tax considerations.

The applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to investors or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters or agents, we will include in the applicable prospectus supplement:

- the names of those underwriters or agents;
- applicable fees, discounts and commissions to be paid to them;
- details regarding options to purchase additional shares, if any; and
- the estimated net proceeds to us.

Common Stock. The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders and do not have any cumulative voting rights. Any election at a meeting of stockholders is determined by a plurality of the votes cast by the stockholders entitled to vote at the election, and all other matters are generally determined by a majority of the votes cast on the matter. Holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of funds legally available. In the event we liquidate, dissolve or wind

up, after payment of all of our debts and liabilities, and subject to the preferential rights, if any, of any outstanding preferred stock, the holders of our common stock are entitled to share ratably in all assets. Our common stock has no preemptive or conversion rights or other subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. We have received full payment for all outstanding shares of our common stock and cannot require our stockholders to make further payments on the stock.

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Under our certificate of incorporation, our board of directors has the authority, without further action by the stockholders (unless such stockholder action is required by applicable law or the rules of any stock exchange or market on which our securities are then traded), to designate up to 20,000,000 shares of preferred stock in one or more series and to determine the designations, voting powers, preferences and rights of each series of the preferred stock, as well as the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series, any or all of which may be greater than the rights of the common stock, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding. Any convertible preferred stock we may issue will be convertible into our common stock or exchangeable for our other securities. Conversion may be mandatory or at the holder's option and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus, we will fix the designations, voting powers, preferences and rights of such series of preferred stock, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock that we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Warrants. We may issue warrants for the purchase of common stock and/or preferred stock. We may issue warrants independently or together with shares of common stock and/or preferred stock, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. Forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants that may be offered will be filed as exhibits to the registration statement of which this prospectus is a part, and supplemental warrant agreements and forms of warrant certificates will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC before the issuance of such warrants.

Any warrants issued under this prospectus will be evidenced by warrant certificates. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading “Risk Factors” in the applicable prospectus supplement and any related free writing prospectus, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Item 1A, “Risk Factors,” in our most recent Annual Report on Form 10-K and any updates described in our Quarterly Reports on Form 10-Q, all of which are incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and any prospectus supplement related to a particular offering. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. Past performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. The occurrence of any of these known or unknown risks could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities, and the occurrence of any of these known or unknown risks might cause you to lose all or part of your investment in the offered securities. Please also read carefully the section below titled “Special Note Regarding Forward-Looking Statements.”

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the information incorporated by reference in this prospectus, contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Exchange Act. Forward-looking statements include statements that may relate to our plans, objectives, goals, strategies, future events, future revenues or performance, capital expenditures, financing needs and other information that is not historical information. All statements other than statements of historical facts contained in this prospectus, including the information incorporated by reference in this prospectus, are statements that could be deemed forward-looking statements reflecting the current beliefs and expectations of management with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. These statements are often identified by the use of words such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “due,” “estimate,” “expect,” “goal,” “if,” “intend,” “may,” “objective,” “plan,” “predict,” “potential,” “positioned,” “seek,” “should,” “target,” “until,” “will,” “would,” and similar expressions or variations.

We believe there is a reasonable basis for our expectations and beliefs, but they are inherently uncertain. We may not realize our expectations, and our beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties, assumptions and other important factors, including those described in this prospectus and the documents incorporated herein by reference, particularly in the sections of such documents titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” The following uncertainties and factors, among others, could affect future performance and cause actual results to differ materially from those matters expressed in or implied by forward-looking statements:

- our ability to successfully execute on our strategy for the development of YB-101;
- the success, cost and timing of our planned filing of investigational drug applications or their equivalents, planned product development activities, and initiation of clinical trials of our current product candidates, including YB-101, and any future product candidates;
- our ability to retain the continued service of our directors, officers, key employees and consultants;
- our ability to continue to grow and manage our growth effectively;
- our ability to obtain regulatory approval for our current or future product candidates that we may identify or develop;
- our ability to ensure adequate supply of our current or future product candidates;
- our ability to maintain third-party relationships necessary to conduct our business;
- our ability to establish an adequate safety or efficacy profile for our current or future product candidates that we may pursue;
- the implementation and execution of our strategic plans for our business, our current or future product candidates we may develop and our technology;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- the rate and degree of market acceptance and clinical utility for our current or future product candidates we may develop;
- our estimates about the size of our market opportunity;
- our estimates of expenses, future revenues, capital requirements and our needs for additional financing;
- our ability to maintain and establish collaborations;

- our financial performance and liquidity;
- developments relating to our competitors and our industry, including the impact of government regulation;
- our ability to retain the continued service of our key professionals and consultants and to identify, hire and retain additional qualified professionals;
- our ability to maintain adequate internal controls over financial reporting;
- the effects of global economic uncertainty and financial market volatility caused by economic effects of volatility in inflation and interest rates, tariffs, geopolitical instability, changes in international trade relationships and conflicts; and
- other risks and uncertainties, including those incorporated by reference under the section titled “Risk Factors.”

Consequently, forward-looking statements speak only as of the date that they are made and should be regarded solely as our current plans, estimates and beliefs. You should not place undue reliance on forward-looking statements. We cannot guarantee future results, events, levels of activity, performance or achievements. Except as required by law, we do not undertake and specifically decline any obligation to update, republish or revise forward-looking statements to reflect future events or circumstances or to reflect the occurrences of unanticipated events.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include funding research and development expenses for our clinical and preclinical pipeline, in-licensing or acquiring other products or technologies, working capital and capital expenditures. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds. We will set forth in the applicable prospectus supplement or free writing prospectus our intended use for the net proceeds received from the sale of any securities sold pursuant to the prospectus supplement or free writing prospectus.

SECURITIES WE MAY OFFER

This prospectus contains summary descriptions of the securities we may offer from time to time. These summary descriptions are not meant to be complete descriptions of each security. The particular terms of any securities will be described in the applicable prospectus supplement.

Description of Capital Stock

The following description of our capital stock is intended as a summary only and therefore is not a complete description of our capital stock. This description is based upon, and is qualified by reference to, our Amended and Restated Certificate of Incorporation (the “Certificate of Incorporation”), our Amended and Restated Bylaws (the “Bylaws”), and applicable provisions of Delaware corporate law. You should read our Certificate of Incorporation and our Bylaws, which are filed as exhibits to the registration statement of which this prospectus forms a part, for the provisions that are important to you.

Our authorized capital stock consists of 300,000,000 shares of common stock, \$0.0001 par value per share, and 20,000,000 shares of preferred stock, \$0.0001 par value per share. As of August 10, 2026, 2,669,746 shares of common stock were outstanding and no shares of preferred stock were outstanding.

Common Stock

Voting Rights. Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a majority of the voting shares are able to elect all of the directors. In addition, the affirmative vote of holders of 66-2/3% of the voting power of all of the then outstanding voting stock will be required to take certain actions, including amending certain provisions of our Certificate of Incorporation, such as the provisions relating to amending our Bylaws, procedures for our stockholder meetings, the classified board, director liability, and exclusive forum for proceedings.

Dividends. Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation and Dissolution. In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Other Rights. Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

Transfer Agent and Registrar. Equiniti Trust Company, LLC is the transfer agent and registrar for our common stock.

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

Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 20,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action.

The specific terms of any series of preferred stock offered pursuant to this prospectus will be described in the prospectus supplement relating to that series of preferred stock.

Anti-Takeover Effects of Provisions of our Certificate of Incorporation, our Bylaws and Delaware Law

Some provisions of Delaware law and our Certificate of Incorporation and our Bylaws contain provisions that could make the following transactions more difficult: acquisition of us by means of a tender offer; acquisition of us by means of a proxy contest or otherwise; or removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions that might result in a premium over the market price for our shares.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Special Stockholder Meetings

Our Bylaws provide that a special meeting of stockholders may be called by our board of directors, chair of our board of directors, Chief Executive Officer or President (in the absence of a Chief Executive Officer).

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our Bylaws include advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Elimination of Stockholder Action by Written Consent

Our Certificate of Incorporation and our Bylaws do not permit stockholders to act by written consent without a meeting.

Classified Board; Election and Removal of Directors; Filling Vacancies

Our board of directors is divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by our stockholders, with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing

for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our Certificate of Incorporation provides for the removal of any of our directors only for cause and requires a stockholder vote by the holders of at least 66-2/3% of the voting power of the then outstanding voting stock. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of the board, may only be filled by a resolution of the board of directors unless the board of directors determines that such vacancies shall be filled by the stockholders. This system of electing and removing directors and filling vacancies may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Choice of Forum

Our Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our Certificate of Incorporation or our Bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Although our Certificate of Incorporation contains the choice of forum provision described above, it is possible that a court could find that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

Amendment of Charter Provisions

The amendment of any of the above provisions, except for the provision making it possible for our board of directors to issue undesignated preferred stock, would require approval by a stockholder vote by the holders of at least 66-2/3% of the voting power of the then outstanding voting stock.

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

Limitations of Liability and Indemnification

Our Certificate of Incorporation contains provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

Each of our Certificate of Incorporation and Bylaws provides that we are required to indemnify our directors and officers, in each case, to the fullest extent permitted by Delaware law. Our Bylaws will also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. With specified exceptions, these agreements provide for indemnification for related

expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these Bylaws provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance. The limitation of liability and indemnification provisions in our Certificate of Incorporation and Bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage.

Description of Warrants

We may issue warrants for the purchase of shares of our common stock or preferred stock. We may issue warrants independently or together with other securities, and the warrants may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent. The following summary of material provisions of the warrants and warrant agreements is subject to, and qualified in its entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to a particular series of warrants. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

The particular terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

- the number of shares of common stock or preferred stock purchasable upon the exercise of warrants to purchase such shares and the price at which such number of shares may be purchased upon such exercise;
- the designation, stated value and terms (including, without limitation, liquidation, dividend, conversion and voting rights) of the series of preferred stock purchasable upon exercise of warrants to purchase preferred stock;
- the date, if any, on and after which the warrants and the related preferred stock or common stock will be separately transferable;
- the terms of any rights to redeem or call the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- U.S. federal income tax consequences applicable to the warrants; and
- any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange, exercise and settlement of the warrants.
- Holders of equity warrants will not be entitled to:
 - vote, consent or receive dividends;
 - receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or
 - exercise any rights as stockholders of Yarrow Bioscience, Inc.

Each warrant will entitle its holder to purchase the number of shares of preferred stock or common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

A holder of warrant certificates may exchange them for new warrant certificates of different denominations, present them for registration of transfer and exercise them at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement. Until any warrants to purchase common stock or preferred stock are exercised, the holders of the warrants will not have any rights of holders of the underlying common stock or preferred stock, including any rights to receive dividends or payments upon any liquidation, dissolution or winding up on the common stock or preferred stock, if any.

PLAN OF DISTRIBUTION

We may sell securities, from time to time:

- through one or more underwriters, dealers or agents;
- directly to one or more purchasers; or
- through a combination of any of these methods of sale or any other method permitted by law.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing security holders. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes any method permitted by law, including, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;
- ordinary brokerage transactions and transactions in which a broker solicits purchasers;
- sales in an “at the market offering” within the meaning of Rule 415(a)(4) under the Securities Act, to or through one or more market makers or into an existing trading market, on an exchange or otherwise; or
- privately negotiated transactions.

We may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act, and describe any commissions that we must pay. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis.

The distribution of the securities may be effected from time to time in one or more transactions:

- 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 related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

A prospectus supplement or supplements (and any related free writing prospectuses that we may authorize to be provided to you) with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

- the name of the agent or any underwriters;
- the public offering or purchase price and the proceeds we will receive from the sale of the securities;
- any discounts, commissions, or agency fees and other items to be allowed constituting underwriting compensation;
- any options under which underwriters may purchase additional securities from us;
- any discounts and commissions to be allowed or re-allowed or paid to dealers;
- any exchanges on which the securities will be listed; and
- other material terms of the offering.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will 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 such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Remarketing firms, agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may over-allot in connection with the offering, creating a short position for their own accounts. In addition, to cover over-allotments or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than two scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities

on any date prior to the second business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle more than two scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

In compliance with the guidelines of the Financial Industry Regulatory Authority ("FINRA"), the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

Any underwriters or agents who are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in the securities on the Nasdaq Capital Market in accordance with Rule 103 of Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

LEGAL MATTERS

Certain legal matters, including the legality of the securities offered, will be passed upon for us by Gibson, Dunn & Crutcher LLP, San Francisco, California. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of VYNE Therapeutics Inc. as of December 31, 2025 and 2024, and for each of the years in the two-year period ended December 31, 2025, incorporated by reference in this prospectus, have been audited by Baker Tilly US, LLP, an independent registered public accounting firm, as set forth in the report thereon, and are incorporated by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The financial statements of Yarrow Bioscience, Inc. (changed to Yarrow Bioscience Operating Company Corp. at time of merger) as of December 31, 2025 and for the period from October 3, 2025 (inception) to December 31, 2025, incorporated by reference in this prospectus, have been audited by Baker Tilly US, LLP, an independent registered public accounting firm, as set forth in the report thereon, and are incorporated by reference in reliance upon such report given on the authority of such firm 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. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. Our common stock is listed on the Nasdaq Capital Market under the symbol "YARW." Copies of certain information filed by us with the SEC are also available free of charge on our website at www.yarrowbioscience.com. Our website is not a part of this prospectus and is not incorporated by reference in this prospectus. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

This prospectus is part of a registration statement we filed with the SEC. This prospectus omits some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiary and the securities we are offering. Those exhibits may be filed with the registration statement or may be incorporated by reference to earlier SEC filings listed in the registration statement or in subsequent filings that we may make under the Exchange Act. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” the information we file with them, which means that we can disclose important information to you by referring you to these documents instead of having to repeat the information in this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated by reference in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. Our periodic reports are filed with the SEC under SEC File Number 001-38356.

We hereby incorporate by reference the following documents:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the SEC on [February 27, 2026](#);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2026 and June 30, 2026, filed with the SEC on [May 15, 2026](#) and [August 13, 2026](#), respectively;
- our Current Reports on Form 8-K filed with the SEC on [January 30, 2026](#), [March 11, 2026](#), [July 10, 2026](#) (except for the information furnished under Item 7.01 therein and Exhibit 99.1 thereto), [July 20, 2026](#), [July 21, 2026](#) (except for the information furnished under Item 7.01 therein and Exhibit 99.1 thereto), [July 28, 2026](#) (except for the information furnished under Items 2.02 and 7.01 therein), [July 30, 2026](#) and [August 13, 2026](#) (except for the information furnished under Items 2.02 and 7.01 therein); and
- the description of our common stock contained in [Exhibit 4.1](#) to our Annual Report on Form 10-K filed with the SEC on [March 14, 2023](#), including any amendments or reports filed for the purpose of updating such description.

In addition, all documents we subsequently file with the SEC pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, until the offering of the securities offered hereby is terminated or completed, shall be deemed to be incorporated by reference in this prospectus.

Unless specifically stated to the contrary, none of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus.

We will furnish to you, regardless of whether you are a beneficial owner, at no cost, upon written or oral request, a copy of all of the documents that have been incorporated by reference in this prospectus and any applicable prospectus supplement, other than the exhibits to such documents unless the exhibits are specifically incorporated by reference but not delivered with this prospectus. Requests should be directed to:

Yarrow Bioscience, Inc.
Attn: Corporate Secretary
470 James Street, Suite 007
New Haven, CT 06513
(203) 433-7577



Shares of Common Stock

Pre-funded Warrants to Purchase

Shares of Common Stock

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

Jefferies

TD Cowen

Guggenheim Securities

Lead Manager

LifeSci Capital

, 2026
