

PROSPECTUS SUPPLEMENT NO. 4
(to Prospectus dated December 18, 2025)



Blaize Holdings, Inc.

18,750,000 Shares of Common Stock

This prospectus supplement updates, amends and supplements the prospectus dated December 18, 2025 (as supplemented or amended from time to time, the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (Registration No. 333-288742). Capitalized terms used in this prospectus supplement and not otherwise defined herein have the meanings specified in the Prospectus.

This prospectus supplement is being filed to supplement the section of the Prospectus titled “Recent Developments in Our Business” as set forth below:

Recent Developments

Reduction in Force

On September 24, 2026, Blaize Holdings, Inc. (the “Company”) implemented a restructuring plan approved by the Board of Directors (the “Board”) to reduce costs and improve operational efficiency, including a reduction in force affecting approximately 26% of the Company’s employees (the “Restructuring Plan”). The Company expects the Restructuring Plan to be substantially completed by December 31, 2026.

Total costs and cash expenditures for the Restructuring Plan are estimated to be in the range of \$1.1 million to \$1.3 million, substantially all of which are related to employee severance and benefits costs. The Company expects to incur most of these pre-tax reduction in force expenses in the third quarter of 2026.

The Company expects to save approximately \$7.5 million to \$8.4 million per year from the reduction in force and other efficiency measures, which the Company expects to reinvest into growth initiatives focused on more profitable areas of the Company’s business.

Nasdaq Bid-Price Deficiency Notice

On September 28, 2026, Blaize Holdings, Inc. (the “Company”) received a letter (the “Notice”) from the Listing Qualifications Department of The Nasdaq Stock Market LLC (“Nasdaq”) notifying the Company that because the closing bid price for the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), was below \$1.00 per share for the last 30 consecutive business days, the Company was not currently in compliance with the minimum closing bid price required for continued listing on the Nasdaq Global Market pursuant to Nasdaq Listing Rule 5450(a)(1) (the “Minimum Bid Price Requirement”). The Company’s Common Stock will continue to trade on The Nasdaq Global Market under the symbol “BZAI” at this time, subject to the Company’s compliance with other Nasdaq listing requirements.

In accordance with Nasdaq Listing Rule 5810(c)(3)(A), the Company has a period of 180 calendar days from September 25, 2026, or until March 29, 2027, to regain compliance with the Minimum Bid Price Requirement. If at any time during the 180-calendar day grace period, the closing bid price of the Company’s Common Stock is at least \$1.00 per share for a minimum of ten consecutive business days (unless the Nasdaq staff exercises its discretion to extend this ten business day period pursuant to

Nasdaq Listing Rule 5810(c)(3)(H)), Nasdaq will provide the Company written confirmation of compliance, and the matter will be closed.

If the Company does not regain compliance during the compliance period, the Company may be provided a second 180 calendar day period to regain compliance if it applies to transfer the listing of the Company's Common Stock to the Nasdaq Capital Market. To qualify, the Company must meet the continued listing requirement for market value of publicly-held shares and all other initial listing standards for the Nasdaq Capital Market (with the exception of the Minimum Bid Price Requirement), based on the Company's most recent public filings and market information and notify Nasdaq of its intent to cure the deficiency. If the Company does not regain compliance within the allotted compliance periods, including any extensions that may be granted by Nasdaq, the Company's stock will be subject to delisting.

The Company intends to monitor the closing bid price of its Common Stock and assess potential actions to regain compliance. While the Company plans to review all available options, the Company may not regain compliance with the Minimum Bid Price Requirement during the 180-day compliance period, secure a second 180-day period to regain compliance, or maintain compliance with the other Nasdaq listing requirements.

Extension of Terms on Accounts Receivable

As of the end of the second quarter of 2026, the Company's accounts receivable balance due from NeoTensr was \$13.3 million, which was due on September 24, 2026. On September 30, 2026, NeoTensr paid \$0.2 million toward this balance, and the Company has agreed to extend the terms of this receivable, which is now expected to be paid during the fourth quarter of 2026.

Revenue Outlook for the Third Quarter of 2026

As of October 5, 2026, on a preliminary basis, Blaize Holdings, Inc. (the "Company") expects to report revenue of approximately \$0.5 million for the three months ended September 30, 2026. This revenue was earned during August 2026 and is related to the sale of the Company's manufactured hardware products to one customer located in Poland.

The preliminary revenue estimates for the third quarter of 2026 is based on currently available information and does not present all necessary information for an understanding of the Company's expected results of operations for the period. The preliminary estimate has been prepared by and is the responsibility of management. The Company has not completed its closing procedures for the third quarter of 2026, and it is possible that items may be identified that require adjustments to the preliminary estimated result set forth above for the third quarter of 2026, and those changes could be material. Accordingly, undue reliance should not be placed on this preliminary estimate. Further, the Company's preliminary estimated revenue for the third quarter of 2026 is not necessarily indicative of the results to be expected for the remainder of the year or any future period.

United States ("U.S.") Government Inquiry and Investigation

In July and August 2026, the Company and certain of its employees and members of the Board received subpoenas and inquiries from the U.S. Department of Justice (the "DOJ") requesting information relating to the Company's business and agreements with certain counterparties. The Company has also received voluntary requests for information from the U.S. Securities and Exchange Commission ("SEC") for information substantially similar to that sought by the DOJ. The Company is cooperating with the DOJ and SEC in responding to their requests for information. The Company cannot predict the outcome of the investigations or whether they will have any impact on the Company's business and financial condition.

Class Action Complaint Filed September 17, 2026

On September 17, 2026, a class action complaint was filed against the Company, certain current and former officers and directors of the Company, and the underwriters of the Company's May 2026 public offering in the United States District Court for the Central District of California, captioned Alyahya v. Blaize Holdings, Inc., et al., Case No. 2:26-cv-10609. The complaint alleges, among other things, that the defendants made false and misleading statements or omissions regarding the Company's contracts with Starshine and NeoTensr. The complaint asserts causes of action under Sections 10(b) and 20(a) of the Exchange Act on behalf of a putative class of investors who purchased the Company's common stock between July 17, 2025 and August 13, 2026, inclusive, and causes of action under Sections 11, 12(a)(2), and 15 of the Securities Act on behalf of a putative class of investors who purchased the Company's common stock pursuant or traceable to the Company's May 2026 public offering. The complaint seeks an order certifying the class; awarding compensatory damages, rescission or rescissory damages, interest, costs, attorneys' and expert fees; and granting other unspecified relief. The case is at a preliminary stage. The Company is in the process of

evaluating the effects of the foregoing events and cannot make a reasonable estimate of any outcome, recovery, or loss at this time.

Cautionary Note Regarding Forward-Looking Statements

This Prospectus Supplement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, about the Company that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this Prospectus Supplement are forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “intend,” “may,” “plan,” “should,” “will,” or the negative of these words or other similar terms or expressions. Forward-looking statements in this Prospectus Supplement include, but are not limited to, the timing and scope of the Restructuring Plan; the amount and timing of the charges associated with the Restructuring Plan; the expected amount of savings resulting from the Restructuring Plan and the Company’s expected use thereof; statements regarding the Company’s intent or ability to regain compliance with Nasdaq’s Minimum Bid Price Requirement, Nasdaq granting the Company any relief from delisting as necessary, and whether the Company can ultimately meet applicable Nasdaq requirements for any such relief; the Company’s preliminary estimated revenue for the three months ended September 30, 2026; the outcome of any ongoing negotiation of customer contracts; the Company’s ability to fulfill orders; the scope, duration, and outcome of the DOJ and SEC inquiries and their potential impact on the Company’s business and financial condition, and the outcome of any putative class action shareholder lawsuits. The forward-looking statements contained in this Prospectus Supplement are based on management’s current expectations, which are subject to uncertainty, risks and changes in circumstances that are difficult to predict and many of which are outside of the Company’s control. Important factors that could cause the Company’s actual results to differ materially from those indicated in the forward-looking statements are more fully discussed in the Company’s periodic filings with the Securities and Exchange Commission (“SEC”), including the risk factors described under the heading “Risk Factors” in the Company’s annual report on Form 10-K for the year ended December 31, 2025 filed with the SEC on March 24, 2026, and amended by Amendment No. 1 on Form 10-K/A filed with the SEC on April 30, 2026 and the risk factors described under the heading “Risk Factors” in the Company’s quarterly reports on Form 10-Q for the quarters ended March 31, 2026 and June 30, 2026 filed with the SEC on July 2, 2026 (as amended) and August 13, 2026, respectively. The forward-looking statements in this Prospectus Supplement are based upon information available to the Company as of the date of this Prospectus Supplement, and while the Company believes such information forms a reasonable basis for such statements, such information may be limited or incomplete, and its statements should not be read to indicate that the Company has conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements. Except as required by law, the Company assumes no obligation to update these forward-looking statements, or to update the reasons if actual results differ materially from those anticipated in the forward-looking statements.

This prospectus supplement is not complete without the Prospectus. This prospectus supplement should be read in conjunction with the Prospectus, which is to be delivered with this prospectus supplement, and is qualified by reference thereto, except to the extent that the information in this prospectus supplement updates or supersedes the information contained in the Prospectus. Please keep this prospectus supplement with your Prospectus for future reference.

Our Common Stock and Warrants are listed on the Nasdaq Stock Market LLC under the trading symbols “BZAI” and “BZAIW,” respectively. On October 5, 2026, the closing prices for our Common Stock and Warrants on the Nasdaq Stock Market LLC were \$0.44 per share of Common Stock and \$0.05 per Warrant.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 8 of the Prospectus and other risk factors contained in the documents incorporated by reference therein for a discussion of information that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if the Prospectus or this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is October 5, 2026