Filed Pursuant to Rule 424(b)(5)
Registration No. 333-289399

30,937,500 Shares of Common Stock

Pre-Funded Warrants to Purchase up to 312,503 Shares of Common Stock

We are offering 30,937,500 shares of our common stock, par value $0.0001 per share. The offering price of each share of common stock is $8.00. We are also offering, in lieu of common stock to certain investors, pre-funded warrants to purchase up to 312,503 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 in this offering, minus $0.0001, which is the exercise price of each pre-funded warrant per share. Each pre-funded warrant will be exercisable from the date of issuance until fully exercised, subject to an ownership limitation.

Our common stock is listed on The Nasdaq Capital Market under the symbol "VSTM." On October 13, 2026, the last reported sale price of our common stock on The Nasdaq Capital Market was $7.45 per share. We do not intend to list the pre-funded warrants on The Nasdaq Capital Market or any other securities exchange or nationally recognized trading system.

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider the information under the heading "*Risk Factors*" beginning on page S-9 of this prospectus supplement and under similar headings in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

	Per Share	Per Pre-Funded Warrant	Total
Offering price	$8.00	$7.9999	$249,999,992.75
Underwriting discounts and commissions[(1)]	$0.48	$ 0.48	$ 15,000,001.44
Proceeds to Verastem, Inc., before expenses	$7.52	$7.5199	$234,999,991.31

(1) See "*Underwriting*" beginning on page S-19 of this prospectus supplement for additional information regarding total underwriter compensation.

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

Delivery of the securities offered hereby is expected to be made on or about October 15, 2026.

Joint Book-Running Managers

Jefferies **Guggenheim Securities** **Cantor**

Lead Manager

B. Riley Securities

Prospectus Supplement dated October 14, 2026

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT

	Page
ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
PROSPECTUS SUPPLEMENT SUMMARY	S-2
THE OFFERING	S-7
RISK FACTORS	S-9
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	S-12
USE OF PROCEEDS	S-14
DESCRIPTION OF PRE-FUNDED WARRANTS	S-15
DILUTION	S-17
UNDERWRITING	S-19
MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS	S-30
LEGAL MATTERS	S-36
EXPERTS	S-36
WHERE YOU CAN FIND MORE INFORMATION	S-36
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	S-36

PROSPECTUS

	Page
ABOUT THIS PROSPECTUS	1
ABOUT THE COMPANY	3
RISK FACTORS	4
FORWARD-LOOKING STATEMENTS	5
USE OF PROCEEDS	7
PLAN OF DISTRIBUTION	8
DESCRIPTION OF COMMON STOCK	10
DESCRIPTION OF PREFERRED STOCK	11
DESCRIPTION OF WARRANTS	12
DESCRIPTION OF DEBT SECURITIES	13
WHERE YOU CAN FIND MORE INFORMATION	21
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	22
LEGAL MATTERS	23
EXPERTS	23

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and certain other matters relating to us and our business. The second part, the accompanying prospectus, contains and incorporates by reference important business and financial information about us, a description of our common stock, pre-funded warrants and certain other information about us and this offering. This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC"), using a "shelf" registration process. Both this prospectus supplement and the accompanying prospectus include or incorporate by reference important information about us, our common stock and other information you should know before investing. You should read both this prospectus supplement and the accompanying prospectus, including all documents incorporated by reference herein and therein by reference, together with the additional information described under the heading "*Where You Can Find More Information*" herein and therein before making an investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectuses we may provide to you in connection with this offering. We have not, and the underwriters have not, authorized any other person to provide you with any information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell, and seeking offers to buy, shares of our common stock and pre-funded warrants only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock and pre-funded warrants in certain jurisdictions may be restricted by law. 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 the common stock, pre-funded warrants and the distribution of this prospectus supplement and the accompanying prospectus outside 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.

This prospectus supplement may add to, update or change the information in the accompanying prospectus or the documents incorporated by reference herein. If information in this prospectus supplement is inconsistent with information in the accompanying prospectus or the documents incorporated by reference herein, this prospectus supplement will apply and will supersede that information in the accompanying prospectus or the documents incorporated by reference herein.

References in this prospectus supplement to "Verastem," the "Company," "we," "us," "our" and similar terms refer to Verastem, Inc. and our subsidiaries on a consolidated basis, as appropriate, unless we state otherwise or the context otherwise requires. Unless otherwise indicated, references to "U.S. dollars," "dollars," "USD" and "$" in this prospectus supplement are to the lawful currency of the United States of America.

The industry and market data and other statistical information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein are based on management's own estimates, independent publications, government publications, reports by market research firms or other published independent sources, and, in each case, are believed by management to be reasonable estimates and sources, as applicable and as of the date hereof. Although we believe any such third-party sources are reliable as of the date hereof, we have not independently verified the information.

This prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein contain references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference herein and therein, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trademarks or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information included or incorporated by reference in this prospectus supplement and the accompanying prospectus and does not contain all of the information that may be important to you. You should carefully review this entire prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering, including the risk factors and financial statements included and incorporated by reference in this prospectus supplement and the accompanying prospectus.

Company Overview

We are a biopharmaceutical company committed to the development and commercialization of new medicines to improve the lives of patients diagnosed with ras sarcoma ("RAS")/ mitogen-activated protein kinase ("MAPK") pathway-driven cancers. On May 8, 2025, the U.S. Food and Drug Administration (the "FDA") approved AVMAPKI FAKZYNJA CO-PACK (avutometinib capsules; defactinib tablets) for the treatment of adult patients with Kirsten rat sarcoma viral oncogene homolog ("KRAS") mutant ("KRAS mt") recurrent low grade serous ovarian cancer ("LGSOC") who received prior systemic therapy. We market AVMAPKI FAKZYNJA CO-PACK in the United States. Our pipeline is focused on novel small molecule drugs that inhibit critical signaling pathways in cancer that promote cancer cell survival and tumor growth, including RAF/MEK inhibition, FAK inhibition and KRAS G12D inhibition.

AVMAPKI (avutometinib) inhibits MEK kinase activity while also blocking the compensatory reactivation of MEK by upstream RAF. RAF and MEK proteins are regulators of the RAS/RAF/MEK/ERK (MAPK) pathway. Blocking RAF and/or MEK activates FAK, a key mediator of drug resistance. FAKZYNJA (defactinib) is a FAK inhibitor and together, the avutometinib and defactinib combination was designed to provide a more complete blockade of the signaling that drives the growth and drug resistance of RAS/MAPK pathway-dependent tumors.

For our clinical-stage pipeline programs, we are evaluating VS-7375, a potential best-in-class oral KRAS G12D (ON/OFF) inhibitor, for the treatment of patients with KRAS G12D mutated cancers, including pancreatic ductal adenocarcinoma ("PDAC"), non-small cell lung cancer ("NSCLC"), colorectal cancer ("CRC") and other KRAS G12D mutated cancers. Based on preclinical data, VS-7375 offers dual, potent inhibition of both ON and OFF states of KRAS G12D. We believe this correlates with better in vivo efficacy and durability versus ON-only RAS inhibitors. VS-7375 has demonstrated a high affinity for KRAS G12D with long residence time (18-24 hours) in preclinical models. We believe this correlates with a more rapid and durable suppression of pERK signaling (which controls growth and cell survival) when compared to other ON-only KRAS G12D inhibitors in tumor cell lines. The selective inhibition of VS-7375 to KRAS G12D has shown, in preclinical models, to spare T cell proliferation to maintain a normal healthy immune response, versus a RAS-multi-inhibitor, which impairs T cell proliferation at increasing concentrations of drug. The once daily ("QD") oral dosing of VS-7375 achieves exposures corresponding to maximal tumor regressions across preclinical models for pancreatic, lung and colorectal cancers. Verastem announced in April 2025 that the U.S. Investigational New Drug ("IND") application for (VS-7375-101) was cleared and initiated a Phase 1/2 clinical trial in June 2025 in patients with advanced KRAS G12D-mutated solid tumors, including PDAC, NSCLC and CRC.

Corporate Information

We were incorporated under the laws of the State of Delaware in August 2010. Our principal executive offices are located at 117 Kendrick Street, Suite 500, Needham, MA 02494, and our telephone number is (781) 292-4200. Our website address is: www.verastem.com. We have included our website address as a factual reference and do not intend it to be an active link to our website. The information that can be accessed through our website is not part of this prospectus, and investors should not rely on any such information in deciding whether to purchase our securities.

Recent Developments

The results of our initial efficacy and updated safety and tolerability data in first multi-clinical cancer data update from the ongoing TARGET-D 101 Phase 1/2 clinical trial evaluating VS-7375, an oral KRAS G12D (ON/OFF) inhibitor, in patients with advanced KRAS G12D-mutated solid tumors are summarized below.

VS-7375 in Metastatic PDAC

Efficacy was assessed in the modified intent-to-treat (mITT) population, defined as any patient that received at least one dose of VS-7375 and started therapy on or before July 22, 2026. A total of 22 patients that met the mITT criteria were included in the efficacy analysis and were treated with VS-7375 900 mg QD monotherapy with a median follow-up of 6.4 (0.8-10.9) months. Patients received a median of two prior lines of therapy (range 1 – 3), including standard-of-care (SoC) chemotherapy. Two patients were non-evaluable but included in the mITT: one died from coronary artery disease and stroke, while the other withdrew consent before the first assessment and died two months later; both deaths were unrelated to treatment.

As of the data cutoff date of October 7, 2026, patients receiving 900 mg VS-7375 daily had a confirmed objective response rate (ORR) of 50% (4/8) in second line (2L) PDAC, a 41% confirmed ORR (9/22) in the 2L+ setting, including two complete responses, one confirmed and one unconfirmed (treatment ongoing), and a 36% confirmed ORR (5/14) in the 3L/4L setting. The disease control rate (DCR) was 86% (n=22) in 2L+, the six month landmark progression free survival (PFS) rate was 67%, and the landmark six-month overall survival (OS) rate was 80% with the majority of patients (16/22) remaining on treatment.

Compared with 600 mg QD monotherapy (n=27 mITT), the 900 mg dose produced deeper tumor reductions and a higher response rate. At 600 mg, eight patients achieved objective responses, including four confirmed responses, and 11 of 27 patients remain on treatment.

Pharmacokinetics & Biomarker Data in mPDAC

In updated pharmacokinetic (PK) data, the 900 mg QD monotherapy dose (n=23) evaluated across KRAS G12D-driven tumors continues to achieve target plasma levels of VS-7375 and provides clear separation from the 600 mg QD monotherapy dose (n=59).

In updated CA19-9 data, 15 of 17 patients with mPDAC treated with VS-7375 900 mg QD that had elevated baseline CA19-9 achieved greater than 50% reduction in the tumor marker. All these patients remain on treatment.

Among 12 evaluable patients with KRAS G12D-mutant mPDAC treated with VS-7375 900 mg monotherapy in the second or later line setting who had detectable KRAS G12D circulating tumor DNA (ctDNA) at baseline, all patients (12/12) achieved a ≥ 50% reduction in KRAS G12D variant allele frequency (VAF) by cycle 3 day 1 of treatment. Ninety-two percent of patients (11/12) achieved even deeper reductions (≥ 90%) and 58% (7/12) achieved a 100% clearance of KRAS G12D ctDNA during this same time period.

VS-7375 First-line mPDAC Phase 3 Trial

Verastem has reached alignment with the U.S. Food and Drug Administration (FDA) on the Phase 3 study design to evaluate VS-7375 in the first-line mPDAC setting. The three-arm study will evaluate a chemotherapy-free regimen of VS-7375 900 mg QD in combination with anti-EGFR, VS-7375 at 900 mg QD in combination with conventional three weeks on and one week off gemcitabine/nab-paclitaxel (GnP), and investigator choice of standard-of-care chemotherapy (GnP or modified FOLFIRINOX). PFS and ORR will serve as dual-primary endpoints, with OS as the secondary endpoint. The Company plans to open the trial by year-end 2026.

VS-7375 in mCRC

Efficacy was assessed in the mITT population, defined as any patient that received at least one dose of VS-7375 and started therapy on or before July 22, 2026. A total of six patients met the mITT criteria, with one patient not evaluable for efficacy due to withdrawing consent prior to first disease assessment. Patients had received a median of two prior lines of standard-of-care therapy (range 2 – 3).

As of the data cutoff date of October 7, 2026, with a median follow up of 6.1 (0.4 – 7.0) months, patients receiving 900 mg QD in combination with anti-EGFR achieved a 33% ORR (2/6 with one confirmed and one unconfirmed response) in the 3L+ setting with five patients remaining on treatment.

At 600 mg in combination with anti-EGFR (n=24 mITT), four patients achieved objective responses, including three confirmed responses and one unconfirmed response with 14 patients remaining on treatment.

Compared with the combination of 600 mg VS-7375 with anti-EGFR, the 900 mg combination produced deeper tumor reductions. Patients are being enrolled at the 900 mg QD dose level in the TARGET-D 203 Phase 2 registration-directed 2L mCRC trial.

VS-7375 in Advanced NSCLC

Efficacy was assessed in the mITT population, defined as any patient that received at least one dose of VS-7375 and started therapy on or before July 22, 2026. A total of 23 patients met the mITT criteria and were included in the efficacy analysis. Patients received a median of one prior line of therapy (range 1 – 3) with standard of care chemotherapy and immunotherapy.

As of the data cutoff date of October 7, 2026, with a median follow up of 4.4 months (2.4 – 12.4), in patients treated with VS-7375 600 mg QD monotherapy, the confirmed ORR was 43% (10/23) in 2L+ NSCLC. Responses were observed as early as the first post-baseline scan at six weeks. The six-month landmark PFS rate was 72%, with the majority of patients (17/23) in the 600 mg NSCLC cohort remaining on treatment. The 900 mg QD dose level is currently being evaluated in the TARGET-D 202 Phase 2 registration-directed advanced NSCLC trial.

The Company also shared preliminary data for VS-7375 600 mg with 1L triplet SOC (chemotherapy and immunotherapy). A total of eight patients met the mITT criteria, which was defined as any patient who received at least one dose of VS-7375 and started therapy on or before July 22, 2026, and were included in the efficacy analysis. One patient withdrew consent before the first post-baseline disease assessment, which was likely triggered by an infusion-related reaction to pembrolizumab.

As of the data cutoff of October 7, 2026, with a median follow-up of 4.4 (0.9-5.8) months, patients treated with VS-7375 600 mg QD in combination with carboplatin, pemetrexed plus pembrolizumab or with pembrolizumab achieved a 75% ORR (6/8) in 1L KRAS G12D adenocarcinoma of the lung. Six patients remain on therapy. Evaluation of VS-7375 900 mg plus SoC is ongoing.

Biomarker Data in NSCLC

Among five evaluable patients with KRAS G12D-mutant advanced NSCLC who received VS-7375 600 mg monotherapy in the second-line or later setting and had detectable KRAS G12D ctDNA at baseline, all patients (5/5) achieved complete clearance of detectable KRAS G12D ctDNA.

Updated Safety & Tolerability of VS-7375 Monotherapy and in Combination

Across monotherapy and combination cohorts in TARGET-D 101, VS-7375 continued to demonstrate a safety profile at both the 600 mg and 900 mg dose levels consistent with prior observations and supported by increasing patient exposure and longer follow-up. As of the September 29, 2026 data cutoff, VS-7375 monotherapy demonstrated the following safety profile at 900 mg QD across different KRAS G12D driven tumor types (n=48):

- The discontinuation rate due to adverse events (AEs) was 2%.
- VS-7375 at 900 mg had a relative dose intensity level of 97% (median IQR 87-100%).
- Treatment-related adverse events (TRAEs) at 900 mg were primarily low-grade nausea, vomiting and diarrhea.
- Twenty-five percent of patients had no gastrointestinal (GI) AEs at the start of the first cycle and by month six approximately 40% of patients had no GI AEs. The vast majority of the GI side effects were effectively managed with standard supportive care measures, with only one reported Grade 3 case of nausea at the 900 mg QD dose that resolved in four days following optimization of anti-emetic agents.
- Grade 3 TRAEs occurred in 10% of patients and only 2% of patients experienced any Grade 3 GI TRAE.
- The limited dose-response relationship observed for GI AEs is consistent with a localized irritant effect rather than systemic toxicity.

- There were only two cases of rash, no greater than Grade 2, at the 900 mg QD dose. There were no cases of mucositis or stomatitis.
- Importantly, no clinically meaningful cytopenias or liver function abnormalities were reported.
- No clinically significant cumulative toxicities have been observed to date and since the June 23, 2026 update.

VS-7375 Safety with SoC Across Tumor Types

In combinations of cetuximab with VS-7375 at 600 mg (n=41) and 900 mg (n=11), no overlapping AEs with anti-EGFR therapy were observed, and rash was consistent with the known cetuximab safety profile. In combinations of GnP with VS-7375 at 600 mg (n=13) and 900 mg (n=8), hematologic AEs and neuropathy were considered most likely attributable to GnP. With appropriate antiemetic prophylaxis, GI AE rates in the GnP and carboplatin pemetrexed and pembrolizumab combinations at 600 mg (n=9) were comparable to VS-7375 monotherapy. To date, in a limited number of patients, the frequency and severity of liver function test elevations and diarrhea in the carboplatin pemetrexed and pembrolizumab combinations have not differed meaningfully.

New Drug Application

On October 7, 2026, the FDA accepted for review our Blister Pack New Drug Application (the "NDA") for the first quarter of 2027 and notified us that the NDA has been granted priority review.

Preliminary Unaudited Third Quarter 2026 Financial Results

Set forth below are certain preliminary unaudited financial results for the three months ended September 30, 2026 and as of September 30, 2026:

- Net product revenue for the three months ended September 30, 2026 is estimated to be within the range of $23.9 million to $24.1 million, compared to $11.2 million for the three months ended September 30, 2025.
- Cash, cash equivalents and investments as of September 30, 2026 is estimated to be $172.8 million, compared to $137.7 million as of September 30, 2025.

The preliminary unaudited third quarter 2026 financial results (the "Preliminary Financial Information") are preliminary and were prepared by our management, based upon our estimates, a number of assumptions and currently available information, and are subject to revision based upon, among other things, quarter-end closing procedures and/or adjustments, the completion of our interim financial statements and other operational procedures.

This Preliminary Financial Information is the responsibility of our management and has been prepared in good faith on a consistent basis with prior periods. However, we have not completed our financial closing procedures for the three months ended September 30, 2026, and our actual results could be materially different from the Preliminary Financial Information provided above. Our independent registered public accounting firm, Ernst & Young LLP ("EY"), has not audited, reviewed, examined, compiled nor applied agreed-upon procedures with respect to the accompanying Preliminary Financial Information and, accordingly, EY does not express an opinion or any other form of assurance with respect thereto. The EY report incorporated by reference into this prospectus supplement and the accompanying prospectus relates to our previously issued financial statements. It does not extend to the Preliminary Financial Information and should not be read to do so.

During the course of the preparation of our financial statements and related notes as of and for the three and nine months ended September 30, 2026, we may identify items that would require us to make material adjustments to this Preliminary Financial Information. As a result, prospective investors should exercise caution in relying on this information and should not draw any inferences from this information. This Preliminary Financial Information should not be viewed as a substitute for full financial statements prepared in accordance with United States generally accepted accounting principles and reviewed by EY.

Chief Executive Officer Transition

On October 12, 2026, Daniel W. Paterson notified our Board of Directors (the "Board") of his decision to retire as President and Chief Executive Officer of the Company, effective January 1, 2027 (the "Effective Date"). Mr. Paterson intends to continue to serve on the Board as a Class III director. His term will expire at the Company's 2027 annual meeting of the stockholders. In connection with the retirement of Mr. Paterson, Michael Bailey will be appointed to the position of President and Chief Executive Officer as of the Effective Date. In connection with his appointment, Mr. Bailey will continue to serve as a Class II director. His term will expire at the Company's 2029 annual meeting of the stockholders.

Termination of ATM Prospectus

In connection with this proposed offering, we suspended and terminated the prospectus (the "ATM Prospectus"), filed with the registration statement of which this prospectus supplement forms a part and related to the sale of common stock that may be issued and sold under our sales agreement with Cantor Fitzgerald & Co., dated August 8, 2025 (the "Sales Agreement"). As a result, we will not make any sales of our common stock pursuant to the Sales Agreement unless and until a new prospectus, prospectus supplement or registration statement is filed. Other than the termination of the ATM Prospectus, the Sales Agreement remains in full force and effect. As of the date of this prospectus supplement no shares of common stock have been sold under the ATM Prospectus.

THE OFFERING

The following summary contains basic information about this offering. The summary is not intended to be complete. You should read the full text and more specific details contained elsewhere in this prospectus supplement and in the documents incorporated by reference herein.

Common stock offered by us	30,937,500 shares.
Pre-funded warrants offered by us	We are also offering, in lieu of common stock to certain investors, pre-funded warrants to purchase up to 312,503 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 in this offering, minus $0.0001, which is the exercise price of each pre-funded warrant per share. Each pre-funded warrant will be exercisable from the date of issuance until fully exercised, subject to an ownership limitation. See "Description of Pre-Funded Warrants".
Offering price per share of common stock	$8.00
Offering price per pre-funded warrant	$7.9999
Common stock to be outstanding immediately after this offering	121,419,115 shares, assuming no pre-funded warrants are exercised.
Use of proceeds	We intend to use the net proceeds from this offering to fund the continued clinical development of VS-7375, and for working capital and other general corporate purposes. See "*Use of Proceeds*."
Risk factors	Investing in our securities involves significant risks. See "Risk Factors" and under similar headings in the documents incorporated by reference into this prospectus supplement for a discussion of factors you should read and consider before investing in our securities.
Nasdaq Capital Market symbol	Our common stock is listed on the Nasdaq Capital Market under the symbol "VSTM". 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.

The number of shares of our common stock to be outstanding upon completion of this offering is based on 90,481,615 shares of our common stock outstanding as of June 30, 2026, and excludes the following, each as of June 30, 2026:

- 3,343,705 shares of our common stock issuable upon the exercise of stock options outstanding under our Amended and Restated 2012 Incentive Plan, our Amended and Restated 2021 Equity Incentive Plan, and our inducement award program (collectively, our "Equity Incentive Plans"), at a weighted average exercise price of $10.05 per share;
- 3,701,673 shares of our common stock issuable upon the vesting of restricted stock units under our Equity Incentive Plans;
- 10,727,692 shares of our common stock reserved and available for future issuance under our Amended and Restated 2021 Equity Incentive Plan, of which 154,580 shares are issuable upon the vesting of restricted stock units granted and 27,500 shares at a weighted-average exercise price of $4.10 per share are issuable upon the exercise of stock options granted subsequent to June 30, 2026 under the Amended and Restated 2021 Equity Incentive Plan;

- 817,547 shares of our common stock reserved and available for future issuance under our inducement award program, of which 780,250 shares are issuable upon the vesting of restricted stock units and 141,000 shares are issuable upon the exercise of stock options at a weighted-average exercise price of $5.45 per share granted subsequent to June 30, 2026 under the inducement award program;
- 5,032,893 shares of our common stock reserved for future issuance under our Amended and Restated 2018 Employee Stock Purchase Plan;
- 9,727,142 shares of our common stock issuable upon the exercise of our currently outstanding pre-funded warrants at an exercise price equal to $0.0001 per share (the "April 2025 Pre-Funded Warrants") and pre-funded warrants at an exercise price equal to $0.0001 per share (the "November 2025 Pre-Funded Warrants").

Unless otherwise indicated, all information in this prospectus supplement reflects or assumes:

- no issuance or exercise of stock options or warrants after June 30, 2026; and
- no exercise of pre-funded warrants to be offered and sold in this offering.

In connection with this proposed offering, we suspended and terminated the ATM Prospectus, filed with the registration statement of which this prospectus supplement forms a part and related to the sale of common stock pursuant to the Sales Agreement. As a result, we will not make any sales of our common stock pursuant to the Sales Agreement unless and until a new prospectus, prospectus supplement or registration statement is filed.

RISK FACTORS

You should consider carefully the risks described below and discussed under the section captioned "Risk Factors" contained in our annual report on Form 10-K for the year ended December 31, 2025 and in any subsequent quarterly reports on Form 10-Q, as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), each of which is incorporated by reference in this prospectus supplement, together with other information in this prospectus supplement, and the information and documents incorporated by reference in this prospectus supplement, and any free writing prospectus that we have authorized for use in connection with this offering before you make a decision to invest in our common stock or our pre-funded warrants. If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected.

This could cause the trading price of our common stock to decline and you may lose all or part of your investment. The risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business operations.

Risks Relating to this Offering and Our Common Stock

We may allocate the net proceeds from this offering in ways that you and other stockholders may not approve.

We intend to use the net proceeds from this offering to fund the continued clinical development of VS-7375, and for working capital and other general corporate purposes. Our expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our commercialization and development efforts, the status of and results from clinical trials, as well as any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. Because the number and variability of factors that will determine our use of the proceeds from this offering, their ultimate use may vary substantially from their currently intended use. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our common stock. See "*Use of Proceeds*."

If you purchase securities in this offering, you will suffer immediate and substantial dilution of your investment.

Because the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock as of June 30, 2026, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock or pre-funded warrants in this offering, you will suffer immediate and substantial dilution of $5.79 per share with respect to the net tangible book value of the common stock or pre-funded warrants based on the offering price of $8.00 per share of common stock and $7.9999 per pre-funded warrant. To the extent securities are issued under outstanding options and restricted stock units, the exercise of our outstanding pre-funded warrants and/or warrants, or the exercise of pre-funded warrants to be sold in this offering or further sales are made pursuant to the Sales Agreement, you will incur further dilution. See "*Dilution*" for a more detailed discussion of the dilution you will incur if you purchase shares of our common stock or pre-funded warrants in this offering.

Investors in this offering may experience future dilution.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into, or exchangeable for, our common stock at prices that may not be the same as the price per share in this offering. We cannot assure you that we will be able to sell shares of our common stock or other related securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering. If the price per share at which we sell additional shares of our common stock or related securities in future transactions is less than the price per share in this offering, investors who purchase our common stock in this offering will suffer a dilution in their investment.

Sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could cause our stock price to decline.

Sales of a substantial number of shares of our common stock or other equity-related securities in the public market could cause the market price of our common stock to decline and impair our ability to raise capital through the sale of additional equity securities. Such sales, or the perception in the market that the holders of a large number of such shares intend to sell, could reduce the market price of our common stock significantly. In connection with this offering, we and our executive officers and directors have entered into lock-up agreements with Jefferies LLC and Guggenheim Securities, LLC, as representatives of the underwriters, that prohibit us and our executive officers and directors, subject to certain specified exceptions or receipt of the prior written consent of Jefferies LLC and Guggenheim Securities, LLC from offering, selling, contracting to sell, pledging or otherwise disposing of, our common stock or securities convertible into or exchangeable for shares of our common stock for a period of 60 days after the date of this prospectus supplement. However, all of the securities sold in this offering and the remaining shares of our common stock outstanding immediately prior to this offering will not be subject to lock-up agreements with Jefferies LLC and Guggenheim Securities, LLC and will be freely tradable without restriction. See "*Underwriting*." If our executive officers or directors sell, or indicate an intention to sell, substantial amounts of our common stock in the public market, the market price of our common stock could decline.

Our Preliminary Financial Information represents management's current reconciliation and are subject to change.

The Preliminary Financial Information contained in "Prospectus Supplement Summary — Recent Developments — Preliminary Unaudited Third Quarter 2026 Financial Results" represents only preliminary financial results and is based on information available to management as of the date of this prospectus supplement. Our actual financial results as of, and for the three months ended, September 30, 2026 are subject to the completion of our financial statements as of such date and for such period. Such actual financial results will not be available until after this offering is completed. This Preliminary Financial Information is the responsibility of our management and has been prepared in good faith on a consistent basis with prior periods. However, we have not completed our financial closing procedures for the three months ended September 30, 2026, and our actual results could be materially different from the Preliminary Financial Information provided above. Our independent registered public accounting firm, EY, has not audited, reviewed, examined, compiled nor applied agreed-upon procedures with respect to the accompanying Preliminary Financial Information and, accordingly, EY does not express an opinion or any other form of assurance with respect thereto. Complete results as of, and for the three months ended, September 30, 2026 will be included in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2026. See the other risks described in this section and "Special Note Regarding Forward-Looking Statements" for additional information regarding factors that could result in differences between these preliminary and the actual financial results we will report for the three months ended September 30, 2026.

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

There is no 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 the pre-funded warrants on any securities exchange or nationally recognized trading system, including The Nasdaq Capital Market. Without an active market, the liquidity of the pre-funded warrants will be limited, and you may be unable to sell the pre-funded warrants at the prices desired or at all. The liquidity of the trading market in the pre-funded warrants and the sale price, if any, for the pre-funded warrants, may be adversely affected by, among other things: (i) changes in the overall market for the pre-funded warrants; (ii) changes in our financial performance or prospects; (iii) changes or perceived changes in our creditworthiness; (iv) the prospects for companies in the industry generally; (v) the number of holders of the pre-funded warrants; and (vi) the interest of securities dealers in making a market for the pre-funded warrants.

We will not receive any meaningful amount of additional funds upon the exercise of the pre-funded warrants.

Each pre-funded warrant will be exercisable until it is fully exercised and by means of payment of the nominal cash purchase price upon exercise or by means 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 a formula set forth in the pre-funded warrant. Accordingly, we will not receive any meaningful additional funds upon the exercise of the pre-funded warrants.

Except for the right to participate in certain dividends and distributions and as otherwise provided in the pre- funded warrants, holders of the pre-funded warrants will have no rights as common stockholders until such holders exercise their pre-funded warrants and acquire shares of our common stock.

Until holders of the pre-funded warrants exercise their pre-funded warrants and acquire shares of our common stock, such holders will have no rights with respect to the shares of our common stock underlying such pre-funded warrants, except for the right to participate in certain dividends and distributions and as otherwise provided in the pre-funded warrants. 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 date.

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

Significant holders or beneficial holders 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 such 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 circumstance 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 such securities. See "*Description of Pre-Funded Warrants*".

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the other documents we have filed with the SEC that are incorporated herein and therein by reference, contain forward-looking statements. These forward-looking statements generally can be identified by the use of words such as “anticipate,” “expect,” “plan,” “could,” “may,” “believe,” “estimate,” “forecast,” “goal,” “potentially,” “project,” and other words of similar meaning All statements, other than statements related to present facts or current conditions or historical facts, contained in this prospectus supplement are forward-looking statements, including statements regarding our strategy, the timing of our CEO transition, future operations, future financial position, including our ability to continue as a going concern through one year from the date of the financial statements for the quarter ended June 30, 2026, future revenues, projected costs, prospects, plans and objectives of management. Such statements relate to, among other things, the commercial success of our marketed product AVMAPKI® FAKZYNJA® CO-PACK (avutometinib capsules; defactinib tablets), the development and activity of our programs and product candidates, avutometinib (rapidly accelerated fibrosarcoma (“RAF”)/ mitogen-activated protein kinase kinase (“MEK”) program), defactinib (focal adhesion kinase (“FAK”) program), and VS-7375 (a selective oral KRAS G12D dual ON/OFF inhibitor), the structure and potential clinical value of our completed, planned and pending clinical trials, including the RAMP 201, RAMP 201J, RAMP 205, RAMP 301 TARGET-D 101, TARGET-D 201, TARGET-D 202, and TARGET-D 203; the timing of commencing and completing trials, including topline data reports, our interactions with regulators; the timeline and indications for clinical development, regulatory submissions and the potential for and timing of commercialization of our product candidates; the potential for additional development programs involving our lead compound and the potential market opportunities thereof; the expected outcome and benefits of our collaboration with GenFleet Therapeutics (Shanghai), Inc. (“GenFleet”) and the estimated addressable markets for, and anticipated market opportunities of our drug candidates.

Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement. Applicable risks and uncertainties include the risks and uncertainties, among other things, regarding: the success in the development and potential commercialization of our product candidates; the uncertainties inherent in research and development, such as negative or unexpected results of clinical trials; the occurrence or timing of applications for our product candidates that may be filed with regulatory authorities in any jurisdictions; whether and when regulatory authorities in any jurisdictions may approve applications that may be filed for our product candidates and, if approved, whether our product candidates will be commercially successful in such jurisdictions; the impact of current and future healthcare reforms, including those affecting the delivery of or payment for healthcare products and services; our ability to obtain, maintain and enforce patent and other intellectual property protection for our product candidates; the scope, timing, and outcome of any legal proceedings; decisions by regulatory authorities regarding trial design, labeling and other matters that could affect the timing, availability or commercial potential of our product candidates; whether preclinical testing of our product candidates and preliminary or interim data from clinical trials will be representative of more mature data or predictive of the results or success of ongoing or later clinical trials; that the timing, scope and rate of reimbursement for our product candidates is uncertain; actions or advice of regulatory agencies to maintain regulatory approval of AVMAPKI FAKZYNJA CO-PACK; that the market opportunities of AVMAPKI FAKZYNJA CO-PACK are based on internal and third-party estimates which may prove to be incorrect; that third-party payors (including government agencies) may not reimburse; our pro forma cash position; uncertainties related to the regulatory and policy actions proposed and enacted by the current U.S. presidential administration that may adversely affect our business; that there may be competitive developments affecting our product candidates; that data may not be available when expected; that enrollment of clinical trials may take longer than expected; that our marketed products and product candidates may cause adverse safety events and/or unexpected concerns may arise from additional data or analysis, or result in unmanageable safety profiles as compared to their levels of efficacy; that we may be unable to successfully validate, develop and obtain regulatory approval for companion diagnostic tests for our product candidates that require or would commercially benefit from such tests, or experience significant delays in doing so; that we may not be able to confirm the results from the RAMP 201 study or expand the approved indication for AVMAPKI FAKZYNJA CO-PACK; that our product candidates may experience manufacturing or supply interruptions or failures; that any of our third-party contract research organizations, contract manufacturing organizations, clinical sites, or contractors, among others, who we rely on may fail to fully perform; that we face substantial competition, which may result in others developing or commercializing

products before or more successfully than we do which could result in reduced market share or market potential for our product candidates; that the development and commercialization of our product candidates may take longer or cost more than planned, including as a result of conducting additional studies or our decisions regarding execution of such commercialization; that we may not have sufficient cash to fund our contemplated operations, including certain of our product development programs; that we may not attract and retain high quality personnel; that we or Pfizer, Inc. ("Pfizer") may fail to fully perform under the license agreement covering certain Pfizer FAK inhibitors, including defactinib; that we or Chugai Pharmaceutical, Co. Ltd. may fail to fully perform under the avutometinib license agreement; that we or Secura Bio, Inc. ("Secura") may fail to fully perform under the asset purchase agreement with Secura, including in relation to milestone payments; that we may not see a return on investment on the payments we have and may continue to make pursuant to the collaboration and option agreement with GenFleet or that GenFleet may fail to fully perform under the agreement; that we may not be able to establish new or expand on existing collaborations or partnerships, including with respect to in-licensing of our product candidates, on favorable terms, or at all; that we may be unable to obtain adequate financing in the future through product licensing, co-promotional arrangements, public or private equity, debt financing or otherwise; that we may not satisfy the closing conditions to receive $50.0 million from our non-dilutive royalty financing arrangement with Oberland Capital; that we may not pursue or submit regulatory filings for our product candidates; and that our product candidates will not receive regulatory approval, become commercially successful products, or result in new treatment options being offered to patients. Other risks and uncertainties include those identified under the heading "Risk Factors" contained in our Annual Report on Form 10-K for the year ended December 31, 2025, as filed with the SEC on March 4, 2026, and our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2026 and June 30, 2026, as filed with the SEC on May 7, 2026 and August 6, 2026, respectively, and in any subsequent filings with the SEC.

As a result of these and other factors, we may not achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. The forward-looking statements contained in this prospectus supplement reflect our views as of the date hereof. We do not assume and specifically disclaim any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. Our business is subject to substantial risks and uncertainties, including those referenced above. Investors, potential investors, and others should give careful consideration to these risks and uncertainties.

USE OF PROCEEDS

We estimate that the net proceeds received by us from this offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately $234.7 million.

We currently estimate that we will use the net proceeds from this offering to fund the continued clinical development of VS-7375, and for working capital and other general corporate purposes.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents and investments and projected revenues from U.S. sales of the AVMAPKI FAKZYNJA CO-PACK, will be sufficient to fund our projected operating expenses and capital expenditures for at least the next 12 months. Our expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from clinical trials, as well as any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending our use of the net proceeds from this offering described above, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DESCRIPTION OF PRE-FUNDED WARRANTS

The following is a brief summary of certain terms and conditions of the pre-funded warrants being offered in this offering. The following description is subject in all respects to the provisions contained in the pre-funded warrants.

Form

The pre-funded warrants will be issued as individual pre-funded warrant agreements to the purchasers. The form of pre-funded warrant will be provided to investors in this offering and will be filed with the SEC as an exhibit to a Current Report on Form 8-K in connection with this offering.

Term

The pre-funded warrants will not expire until they are fully exercised.

Exercisability

The pre-funded warrants will be immediately exercisable at any time until they are fully exercised. The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and by payment in full of the exercise price in immediately available funds for the number of shares of common stock purchased upon such exercise. A holder of the pre-funded warrants 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.

Exercise Limitations

We may not effect the exercise of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any pre-funded warrant that, upon giving effect to such exercise, would cause: (i) the aggregate number of shares of our common stock beneficially owned by such holder (together with its affiliates and other attribution parties) to exceed 4.99% or 9.99%, at the election of the holder (or such higher percentage up to 19.99%, at the election of the holder) of the number of shares of our common stock outstanding immediately after giving effect to the exercise; or (ii) the combined voting power of our securities beneficially owned by such holder (together with its affiliates and other attribution parties) to exceed 4.99% or 9.99%, at the election of the holder (or such higher percentage up to 19.99%, at the election of the holder) of the combined voting power of all of our securities outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. However, any holder of a pre-funded warrant may increase or decrease such percentage to any other percentage not in excess of 19.99% provided that any such increase or decrease will not be effective until the sixty-first (61st) day after such notice is delivered to us subject to the terms of the pre-funded warrant.

Exercise Price

The exercise price of shares of our common stock purchasable upon the exercise of the pre-funded warrants is $0.0001 per underlying share of common stock. The exercise price of the pre-funded warrants and the number of shares of common stock issuable upon exercise of the pre-funded warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our shares of common stock, as well as upon any distribution of assets, including cash, stock or other property, to our stockholders. The exercise price of the pre-funded warrants will not be adjusted below the par value of our shares of common stock.

Fractional Shares

No fractional shares shall be issued upon the exercise of the pre-funded warrants, and the number of shares of common stock to be issued upon the exercise of such pre-funded warrants shall be rounded down to the nearest whole share. If a fractional share interest arises upon any exercise of a pre-funded warrant,

we shall eliminate such fractional share interest by paying the holder in cash the amount computed by multiplying the fractional interest by (i) the fair market value (as determined in accordance with the terms of the pre-funded warrants) of a full share, less (ii) the then-effective exercise price.

Transferability

Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent.

No Listing

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 list the pre-funded warrants on The Nasdaq Capital Market, any other national securities exchange or any other nationally recognized trading system. Without an active market, the liquidity of the pre-funded warrants will be limited.

Acquisitions

Upon the consummation of an acquisition (as described in the pre-funded warrants, and generally including any reorganization, recapitalization or reclassification of our shares of common stock, the sale, lease, exclusive license or other disposition of all or substantially all of our assets, our merger or consolidation with or into another person, or any other corporate reorganization in which our stockholders immediately following such transaction own less than fifty percent of the voting power of our (or the surviving entity's) outstanding shares of common stock, or if we are not the surviving entity, or if our stockholders sell or transfer shares representing greater than fifty percent of our then-total outstanding combined voting power), the holders of the pre-funded warrants will be entitled to receive, upon exercise of the pre-funded warrants, the kind and amount of securities, cash or other property that such holders would have received had they exercised the pre-funded warrants immediately prior to such acquisition, without regard to any limitations on exercise contained in the pre-funded warrants.

No Rights as a Stockholder

Except for the right to participate in certain dividends and distributions and as otherwise provided in the pre-funded warrant or by virtue of such holder's ownership of shares of our common stock, a holder of a pre-funded warrant does not have the rights or privileges of a holder of shares of our common stock, including any voting rights, until such holder exercises the pre-funded warrant.

Waivers and Amendments

The pre-funded warrants and any term thereof may only be amended or otherwise changed, waived, discharged or terminated in writing, signed by the party against which enforcement of such amendment or other change, waiver, discharge or termination is sought.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock after giving effect to this offering.

Our historical net tangible book value as of June 30, 2026 was $34.1 million, or $0.38 per share of our common stock. Historical net tangible book value per share represents the amount of our total tangible assets less total liabilities, divided by 90,481,615 shares of our common stock outstanding as of June 30, 2026.

After giving effect to the sale of 30,937,500 shares of our common stock in this offering at the offering price of $8.00 per share and the pre-funded warrants to purchase up to 312,503 shares of our common stock in this offering at an offering price of $7.9999 per pre-funded warrant (which equals the offering price per share of the common stock less the $0.0001 per share exercise price of each such pre-funded warrant) (and excluding shares of common stock issuable upon the exercise of pre-funded warrants), and after deducting the underwriting discounts and commissions and the estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2026 would have been approximately $268.8 million, or approximately $2.21 per share of common stock. This represents an immediate increase in net tangible book value per share of $1.83 to existing stockholders and immediate dilution of $5.79 in net tangible book value per share to new investors participating in this offering.

Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the offering price per share paid by new investors. The following table illustrates this calculation on a per share basis.

Offering price per share of common stock		$8.00
Net tangible book value per share as of June 30, 2026	$0.38	
Increase in net tangible book value per share attributable to new investors	1.83	
As adjusted net tangible book value per share after this offering		2.21
Dilution per share of common stock to new investors participating in the offering		$5.79

Unless otherwise indicated, the above discussion and table are based on 90,481,615 shares outstanding as of June 30, 2026, and excludes the following, each as of June 30, 2026:

- 3,343,705 shares of our common stock issuable upon the exercise of stock options outstanding under our Equity Incentive Plans, at a weighted average exercise price of $10.05 per share;
- 3,701,673 shares of our common stock issuable upon the vesting of restricted stock units under our Equity Incentive Plans;
- 10,727,692 shares of our common stock reserved and available for future issuance under our Amended and Restated 2021 Equity Incentive Plan, of which 154,580 shares are issuable upon the vesting of restricted stock units and 27,500 shares at a weighted-average exercise price of $4.10 per share are issuable upon the exercise of stock options granted subsequent to June 30, 2026 under the Amended and Restated 2021 Equity Incentive Plan;
- 817,547 shares of our common stock reserved and available for future issuance under our inducement award program, of which 780,250 shares are issuable upon the vesting of restricted stock units and 141,000 shares are issuable upon the exercise of stock options at a weighted-average exercise price of $5.45 per share granted subsequent to June 30, 2026 under the inducement award program;
- 5,032,893 shares of our common stock reserved for future issuance under our Amended and Restated 2018 Employee Stock Purchase Plan;
- 9,727,142 shares of our common stock issuable upon the exercise of our April 2025 Pre-Funded Warrants at an exercise price equal to $0.0001 per share and November 2025 Pre-Funded Warrants at an exercise price equal to $0.0001 per share.

This discussion of dilution, and the table quantifying it, assumes except as noted above, (i) no issuance, vesting of restricted stock units or exercise of stock options, pre-funded warrants or warrants after June 30,

2026; and (ii) no exercise of pre-funded warrants to be offered and sold in this offering. The exercise of outstanding options to purchase shares of our common stock having an exercise price less than the offering price would increase the dilutive effect to new investors.

In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

If holders of pre-funded warrants exercise the pre-funded warrants in full, the as adjusted net tangible book value per share of our common stock after giving effect to this offering would be $2.21 per share, representing an increase in net tangible book value of approximately $1.83 per share attributable to new investors and immediate dilution in net tangible book value of approximately $5.79 per share to investors purchasing common stock in this offering at the offering price.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated October 14, 2026, between us and Jefferies LLC and Guggenheim Securities, LLC as the representatives of the underwriters named below and, together with Cantor Fitzgerald & Co., 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 shares underlying pre-funded warrants shown opposite its name below:

Underwriters	Number of Shares of Common Stock	Number of Shares of Common Stock underlying Pre-Funded Warrants
Jefferies LLC	12,375,000	125,002
Guggenheim Securities, LLC	9,281,250	93,751
Cantor Fitzgerald & Co.	8,043,750	81,250
B. Riley Securities, Inc.	1,237,500	12,500
Total	30,937,500	312,503

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 non-defaulting 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 (or pre-funded warrants) 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 (or pre-funded warrants) 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 (or pre-funded warrants) subject to their acceptance of the shares of common stock (or 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.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock (or pre-funded warrants) at the 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 $0.288 per share of common stock (or pre-funded warrant). After the offering, the offering price, concession and reallowance 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 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.

	Per Share	Per Pre-Funded Warrant	Total
Offering price	$8.00	$7.9999	$249,999,992.75
Underwriting discounts and commissions paid by us	$0.48	$ 0.48	$ 15,000,001.44
Proceeds to us, before expenses	$7.52	$7.5199	$234,999,991.31

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $300,000.

Listing

Our common stock is listed on The Nasdaq Capital Market under the trading symbol "VSTM".

Stamp Taxes

If you purchase securities 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.

No Sales of Similar Securities

We, our executive officers, and our 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-l(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 (the "Lock-up Period") without the prior written consent of Jefferies LLC and Guggenheim Securities, 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.

The restrictions described in the immediately preceding paragraphs do not apply to:

a) the transfer of the common stock or options or warrants or other rights to acquire common stock or any securities exchangeable or exercisable for or convertible into common stock, or to acquire other securities or rights ultimately exchangeable or exercisable for or convertible into common stock (the "Related Securities") acquired in this offering or in open market transactions after the completion of this offering; provided that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent sales of the common stock or Related Securities acquired in such transactions (other than as otherwise permitted pursuant to the other provisions of the lock-up agreement with the underwriters of this offering);

b) the transfer of common stock or Related Securities to the Company pursuant to a "net" or "cashless" exercise by the undersigned of outstanding equity awards pursuant to an employee benefit plan of the Company as in effect and disclosed in the final prospectus used for this offering, including to satisfy the exercise price or withholding tax or remittance obligations; provided that (i) any shares received upon such exercise shall be subject to all of the restrictions set forth in this letter agreement and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of common stock, shall be required or shall be voluntarily made during the

Lock-up Period, unless such filing indicates in the footnotes thereto that the filing relates to the exercise of equity awards, that no shares were sold to the public by the reporting person and the shares received upon exercise of such securities are subject to a lock-up agreement with the representatives of the underwriters;

c) the exercise of Related Securities, pursuant to an employee benefit plan disclosed in the final prospectus used for this offering; provided that (i) any common stock received upon such exercise shall be subject to all of the restrictions set forth in this letter agreement and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing shall indicate in the footnotes thereto that such filing relates to the exercise of options, stock appreciation rights or warrants to purchase shares and the shares received upon exercise of such securities are subject to a lock-up agreement with the representatives of the underwriters;

d) transfers of common stock or Related Securities as a bona fide gift; provided that (i) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of our common stock, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing indicates in the footnotes thereto that such transfer was made in connection with a bona fide gift and the common stock or Related Securities, as applicable, received pursuant to the bona fide gift are subject to a lock-up agreement with the representatives of the underwriters, and (ii) each donee, distributee or transferee shall sign and deliver a lock-up letter substantially in the form of this letter agreement;

e) distributions of common stock or Related Securities to partners, limited partners, members, managers, affiliates (within the meaning set forth in Rule 405 under the Securities Act and including the subsidiaries of the undersigned), stockholders or holders of similar equity interests of the undersigned or to any investment fund or other entity that directly or indirectly controls or manages, is under common control with, or is controlled or managed by, the undersigned or affiliates of the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds controlled or managed by such partnership) (including upon the liquidation or dissolution of the undersigned pursuant to a plan of liquidation approved by the undersigned's equity holders) or in the case of a trust, to a grantor or beneficiary of the trust, and such transfer does not involve a disposition for value; provided that (i) each donee, distributee or transferee shall sign and deliver a lock-up letter substantially in the form of this letter agreement, and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing indicates in the footnotes thereto that such transfer is a distribution to limited partners, members, stockholders or holders of similar equity interests, that no common stock or Related Securities, as applicable, were sold to the public by the reporting person and the common stock or Related Securities, as applicable, distributed are subject to a lock-up agreement with the representatives of the underwriters;

f) transfers of common stock, (i) to any Immediate Family Member (as such term is set forth in Rule 16a-1(e) under the Exchange Act), trusts for the direct or indirect benefit of the undersigned or the Immediate Family Members of the undersigned or any of their successors upon death, or any partnership or limited liability company, the partners or members of which consist of the undersigned and/or Immediate Family Members or other dependents of the undersigned, and in each case such transfer does not involve a disposition for value, or (ii) to a nominee or custodian of a person or entity to whom disposition or transfer would be permitted under clause (f)(i) above; provided that in the case of any transfer pursuant to this clause (f), (i) each donee, distributee or transferee shall sign and deliver a lock-up letter substantially in the form of this letter agreement, and (ii) no filing by any party (donor, donee, transferor or transferee) under the Exchange Act (other than any required filing on a Form 5 made after the expiration of the Lock-up Period or, if a Form 5 filing is required to be made prior to the expiration of the Lock-up Period, such Form 5 filing is made on the latest date permitted under the Exchange Act) or other public announcement reporting a reduction in beneficial ownership of shares shall be required or shall be made voluntarily in connection with such transfer or distribution;

g) transfers of common stock or Related Securities by will or intestacy or pursuant to a domestic order, divorce settlement, divorce decree or separation agreement; provided that in the case of any transfer pursuant to (g), unless prohibited by an order of a court, (i) each donee or distributee shall sign and deliver a lock-up letter substantially in the form of this letter, and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of common stock, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing indicates in the footnotes thereto the nature of the transfer or disposition;

h) transfers or dispositions of common stock or Related Securities to the Company (i) pursuant to any contractual arrangement in effect on the date of this agreement and described in the final prospectus used for this offering that provides for the repurchase of the undersigned's common stock or Related Securities by the Company or (ii) in connection with the termination of the undersigned's employment with or service to the Company; provided that in each case no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of common stock, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing indicates in the footnotes thereto the nature of the transfer or disposition;

i) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act (a "Rule 10b5-1 Trading Plan") for the transfer of common stock, provided that (x) such plan does not provide for the transfer of common stock during the Lock-up Period, (y) no public announcement or filing under the Exchange Act shall be voluntarily made by or on behalf of the undersigned or the Company during the Lock-up Period regarding the establishment of such plan, and (z); to the extent a public announcement or filing under the Exchange Act, if any, is required by or on behalf of the undersigned or the Company regarding the establishment of a Rule 10b5-1 Trading Plan during the Lock-up Period, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such Rule 10b5-1 Trading Plan during the Lock-up Period;

j) (i) the transfer of common stock or Related Securities pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of common stock and approved by the Company's board of directors involving any bona fide third party tender offer, merger, consolidation or other similar transaction, in one transaction or a series of related transactions, the result of which is that any "person" (as defined in Section 13(d)(3) of the Exchange Act) or group of persons, other than the Company, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of more than 50% of total voting power of the voting stock of the Company (or the surviving entity) (a "Change of Control") and (ii) entry into any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of common stock or such Related Securities in connection with a transaction described in (i) above, provided, that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the undersigned's common stock or Related Securities shall remain subject to the terms of this letter agreement;

k) transfers pursuant to an order of a court or regulatory agency; provided that in the case of any transfer pursuant to (k), (i) unless prohibited by an order of a court or regulatory agency, the undersigned must request that each transferee sign and deliver a lock-up letter substantially in the form of this letter and (ii) any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of common stock required to be made during the Lock-up Period shall state that such transfer is pursuant to an order of a court or regulatory agency;

l) transfers to the Company for the purpose of satisfying any tax or other governmental withholding obligation with respect to, or in connection with, a vesting event of the Company's securities, upon the exercise of the Company's securities or upon expiration of the Company's securities, in each case held by the undersigned; provided that no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of common stock, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing indicates in the footnotes thereto that the shares were transferred to the Company in order to satisfy tax or other governmental withholding obligations of the reporting person and that no shares were sold to the public by the reporting person;

m) sales of common stock for the purpose of satisfying any tax or other governmental withholding obligation with respect to, or in connection with, a vesting event of the Company's securities, upon the exercise of the Company's securities or upon expiration of the Company's securities, in each case held by the undersigned; provided that no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of common stock, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing indicates in the footnotes thereto that the shares were sold in order to satisfy tax or other governmental withholding obligations of the reporting person;

n) in connection with sales of common stock made pursuant to a Rule 10b5-1 Trading Plan that has been entered into by the undersigned prior to the date of this letter agreement; provided that (i) such Rule 10b5-1 Trading Plan was established by the undersigned prior to the execution of this letter agreement, a copy of such Rule 10b5-1 Trading Plan was provided to the representatives prior to the execution of this letter agreement, (ii) such Rule 10b5-1 Trading Plan will not be amended or otherwise modified during the Lock-up Period, and (iii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of common stock, shall be required or shall be voluntarily made during the Lock-up Period, unless such filing indicates in the footnotes thereto that the shares were sold pursuant to such Rule 10b5-1 Trading Plan; or

o) file a new registration statement on Form S-3 and/or prospectus or prospectus supplement for an "at-the-market" offering; provided that none of the Company's securities are issued or sold pursuant to such registration statement and/or prospectus or prospectus supplement during the Lock-up Period.

Jefferies LLC and Guggenheim Securities, LLC may, in their sole discretion and at any time or from time to time before the termination of the Lock-up 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, and certain persons participating in the offering may, pursuant to Regulation M under the Exchange Act, 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 by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering. The underwriters may close out any covered short position by purchasing shares of our common stock in the open market. Because we have not granted the underwriters an option to purchase additional shares, the underwriters must close out any short position by purchasing shares in the open market.

"Naked" short sales are sales by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering. 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 underwriters' 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 is purchased in a syndicate covering transaction and therefore has 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 in electronic format may be made available by e-mail 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 the prospectus in electronic format, the information on the underwriters' websites and any information contained in any other website 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 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 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.

In the ordinary course of their various business activities, the underwriters and certain of their 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 common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock 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

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area (each, a "Relevant State"), no shares 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 shares 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 shares may be offered to the public in that Relevant State at any time:

(a) to any legal entity which is a "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 shares 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.

For the purposes of this provision, the expression "offer to the public" in relation to the shares 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 shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Notice to Prospective Investors in the United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Section 86 of the FSMA, provided that no such offer of the shares shall require the issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. 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 in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Notice to Prospective Investors in 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: (i) to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or (ii) 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), that 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 securities that 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 and the accompanying prospectus have not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus supplement and the accompanying prospectus 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 accompanying prospectus and that he is not acquiring, and has not been offered, any securities in circumstances that contravene any such restrictions.

Notice to Prospective Investors in 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 (the 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.

Notice to Prospective Investors in Singapore

This prospectus supplement and the accompanying prospectus have not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus supplement and the accompanying prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares of common stock offered hereby may not be circulated or distributed, nor may the shares of common stock 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 shares of common stock are subscribed or purchased under Section 275 of the SFA by a relevant person that is:

- 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
- 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 shares of common stock pursuant to an offer made under Section 275 of the SFA except:
  - 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;
  - where no consideration is or will be given for the transfer;
  - where the transfer is by operation of law;
  - as specified in Section 276(7) of the SFA; or
  - as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

(A) Resale Restrictions

The distribution of shares of common stock in Canada is being made only in the provinces of Ontario, Quebec, Alberta, British Columbia, Manitoba, New Brunswick and Nova Scotia 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 shares of common stock 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 shares of common stock 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:

- purchaser is entitled under applicable provincial securities laws to purchase the shares of common stock 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 document.

(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 offering memorandum (including any amendment thereto) such as this document 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 shares of common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares of common stock in their particular

circumstances and about the eligibility of the shares of common stock for investment by the purchaser under relevant Canadian legislation.

Notice to Prospective Investors in Australia

This prospectus supplement and the accompanying prospectus 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 and Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus supplement and the accompanying prospectus 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 the Company that 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 Company under Section 708(12) of the Corporations Act; or
- a "professional investor" under 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 supplement and the accompanying prospectus is void and incapable of acceptance.

Further, you warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus supplement and the accompanying 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.

Notice to Prospective Investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968 (the "Israeli Securities Law"), and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus supplement and the accompanying prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock offered hereby 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 to the Israeli Securities Law, as it may be amended from time to time (the "Addendum"), 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, 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 the Addendum and agree to it.

Notice to Prospective Investors in Switzerland

The shares of common stock 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 and the accompanying prospectus 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 and the accompanying prospectus, nor any other offering or marketing material relating to the shares of common stock or the offering, may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus supplement and the accompanying prospectus, nor any other offering or marketing material relating to the offering, the Company or the shares of common stock offered hereby, have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus supplement and the accompanying prospectus will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of 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 shares of common stock offered hereby.

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following discussion is a summary of the material U.S. federal income tax consequences to U.S. Holders and Non-U.S. Holders (each, as defined below, and together, "Holders") of the purchase, ownership, and disposition of our common stock and pre-funded warrants, which we sometimes refer to collectively as our securities, but does not purport to be a complete analysis of all potential tax effects. The effects 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 (including temporary Treasury Regulations) promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the "IRS"), in each case as 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. 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 consequences of the purchase, ownership, and disposition of our securities.

This discussion is limited to Holders that hold our securities 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 consequences relevant to a Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income and the alternative minimum tax. In addition, it does not address consequences relevant to Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons holding our securities 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, and other financial institutions;
- brokers, dealers, or traders in securities;
- "controlled foreign corporations," (including "specified foreign corporations"), "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- other pass-through entities such S corporations, disregarded entities for federal income tax purposes and limited liability companies that are treated as a pass-through entity for U.S. federal income tax purposes (and investors therein);
- real estate investment trusts or regulated investment companies;
- persons for whom our stock constitutes "qualified small business stock" within the meaning of Section 1202 of the Code or as "Section 1244 stock" for purposes of Section 1244 of the Code;
- persons required for U.S. federal income tax purposes to conform the timing of income accruals to their financial statements under Section 451(b) of the Code;
- integral parts or controlled entities of foreign sovereigns;
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our securities under the constructive sale provisions of the Code;
- persons that own, or are deemed to constructively own, more than five percent of our capital stock (by vote or value), except to the extent specifically set forth below;
- persons who hold or receive our securities pursuant to the exercise of any employee stock option or otherwise as compensation;
- tax-qualified retirement plans; and
- "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 a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds our securities, 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, partnerships holding our securities and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP, AND DISPOSITION OF OUR SECURITIES 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.

Definition of U.S. Holder and Non-U.S. Holder

For purposes of this discussion, a "U.S. Holder" is any beneficial owner of our securities 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 created 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 (1) 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 (2) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our securities that is neither a U.S. Holder nor an entity or arrangement treated as a partnership for U.S. federal income tax purposes.

Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, a pre-funded warrant should be treated as a share of our common stock for U.S. federal income tax purposes and a holder of pre-funded warrants should generally be taxed in the same manner as a holder of such shares, as described in this prospectus supplement, subject to the discussion regarding constructive distributions below.

Accordingly, no gain or loss should be recognized upon the exercise of a pre-funded warrant (other than with respect to cash paid in lieu of a fractional share and except in the case of a cashless exercise, the treatment of which for U.S. federal income tax purposes is not clear) and, upon exercise, the holding period of a pre-funded warrant should carry over to the share received. Similarly, the tax basis of the pre-funded warrant should carry over to the share received upon exercise, increased by the exercise price of $0.0001 per share.

A holder of a pre-funded warrant may, in some circumstances, be deemed to have received a distribution subject to U.S. federal income tax or withholding tax as a result of an adjustment or the non-occurrence of an adjustment to the exercise price or number of shares of common stock issuable upon exercise of the pre-funded warrant. Such a deemed distribution could arise if, for example, an adjustment to the number of shares issuable upon exercise (as discussed in the section of this prospectus supplement captioned "*Description of Pre-Funded Warrants*") increases the holder's proportionate interest in our assets or earnings and profits as a result of a distribution of cash to the holders of shares of our common stock which is taxable to such holders as a distribution. Such constructive distribution would be subject to tax in the same manner as if such Holder received a cash distribution from us (in each case, as described below) equal to the fair market value of such increased interest. Any resulting withholding tax may be collected from other

amounts payable or distributable to the holder. Holders should consult their tax advisors regarding the proper treatment of any adjustments to the pre-funded warrants.

Our characterization is not binding on the Internal Revenue Service, and the Internal Revenue Service may treat our pre-funded warrants as warrants to acquire our common stock. In that case, the amount and character of your gain with respect to an investment in our pre-funded warrants could be materially different than the discussion described above. Accordingly, each holder should consult his, her or its own tax advisor regarding the risks associated with the acquisition of pre-funded warrants pursuant to this offering (including potential alternative characterizations).

U.S. Holders

Distributions with Respect to Our Common Stock

We do not anticipate declaring or paying cash dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions 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.

Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "*Sale or Other Taxable Disposition of Our Securities.*"

Dividends we pay to a U.S. Holder that is a corporation 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 Our Securities

Upon a sale, taxable exchange or other taxable disposition of our securities, a U.S. Holder will generally recognize taxable gain or loss in an amount equal to the difference between (1) the amount realized upon such sale, exchange or taxable disposition and (2) the U.S. Holder's tax basis in the security. Such gain or loss will generally be treated as long-term capital gain or loss if the security is held by the U.S. Holder for more than one year at the time of such sale, exchange or disposition. Long-term capital gains recognized by certain non-corporate U.S. Holders generally are taxed at preferential rates. The deductibility of capital losses is subject to certain limitations.

Information Reporting and Backup Withholding

In general, information reporting requirements may apply to dividends paid to a U.S. Holder on our common stock (or constructive distributions with respect to pre-funded warrants) and to the proceeds of the sale, exchange or other taxable disposition of our securities, unless the U.S. Holder is an exempt recipient and properly certifies their exemption. Backup withholding may apply to such payments if the U.S. Holder fails to provide a taxpayer identification number, typically on an IRS Form W-9, 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). If backup withholding applies to a payment, we or our paying agent will deduct the amount of any required withholding directly from such payment and remit it directly to the U.S. Treasury on behalf of the U.S. Holder.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will 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 with Respect to Our Common Stock

We do not anticipate declaring or paying cash dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such

distributions 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.

Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "*Sale or Other Taxable Disposition of Securities.*"

Subject to the discussion below on effectively connected income, dividends paid to a Non-U.S. Holder 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 the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-U.S. Holder are effectively connected with the 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 in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption from withholding, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates. 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. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or Other Taxable Disposition of Our Securities

Subject to the discussions below regarding FATCA and backup withholding, a Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our securities unless:

- the gain is effectively connected with the 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 in the United States to which such gain is attributable);
- the Non-U.S. Holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs, as calculated pursuant to Section 7701(b) of the Code, and certain other conditions are met; or
- our securities 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 at any time within the shorter of the five-year period preceding the disposition or the Non-U.S. Holder's holding period for our common stock.

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 generally. 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.

A Non-U.S. Holder described in the second bullet point above 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) on gain realized upon the sale or other taxable disposition of our securities, which may be offset by U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the 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, generally, a corporation is a USRPHC only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. We believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition of our securities by a Non-U.S. Holder will not be subject to U.S. federal income tax if our securities are "regularly traded," as defined by applicable Treasury Regulations, on an established securities market and such Non-U.S. Holder owned, actually and constructively, 5% or less of our securities throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Payments of dividends or other distributions on our securities will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E, or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any distributions (including constructive distributions) on our securities paid to the Non-U.S. Holder, regardless of whether such distributions constitute dividends or whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our securities within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person or the holder otherwise establishes an exemption. Proceeds of a disposition of our securities conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS 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.

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 (such Sections commonly referred to as the Foreign Account Tax Compliance Act ("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 (including constructive dividends) on, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of, our securities paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) 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 and reporting requirements in (1) 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 United States 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 non-compliant foreign financial institutions

and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends (including constructive dividends) on our securities. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of stock, proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors are urged to consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our securities.

THE PRECEDING DISCUSSION OF U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY. IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE AND LOCAL AND NON-U.S. TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK AND PRE-FUNDED WARRANTS, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon by our counsel, Ropes & Gray LLP, Boston, Massachusetts. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, is counsel for the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements of Verastem, Inc. appearing in Verastem, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2025, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein 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

This prospectus supplement is part of a registration statement we filed with the SEC. This prospectus supplement does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC, including us. The address of the SEC website is www.sec.gov.

We maintain a website at www.verastem.com. Information contained in, or accessible through, our website is not a part of, and is not incorporated into, this prospectus supplement, and you should not consider it part of this prospectus supplement.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it which means that we can disclose important information about us by referring you to those documents instead of having to repeat the information in this prospectus supplement. The information incorporated by reference is considered to be part of this prospectus supplement, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference into this prospectus supplement the documents listed below and any future filings, including all filings made after the date of this prospectus supplement, made by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, except for information "furnished" under Items 2.02, 7.01 or 9.01 on Form 8-K or other information "furnished" to the SEC which is not deemed filed and not incorporated in this prospectus supplement, until the termination of the offering of securities described in this prospectus supplement. We hereby incorporate by reference the following documents:

- our Annual Report on Form 10-K for the year ended December 31, 2025, as filed with the SEC on March 4, 2026;
- our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2026, as filed with the SEC on May 7, 2026 and for the quarter ended June 30, 2026, as filed with the SEC on August 6, 2026;
- our Current Reports on Form 8-K filed with the SEC on May 26, 2026, June 17, 2026, June 23, 2026, August 7, 2026 and October 14, 2026;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2025 from our Definitive Proxy Statement on Schedule 14A for the 2026 Annual Meeting of Stockholders, as filed with the SEC on April 9, 2026; and
- the description of our common stock, which is contained in our Registration Statement on Form 8-A, dated January 23, 2012, as supplemented by the description of our common stock and preferred stock contained in Exhibit 4.2 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the SEC on March 4, 2026.

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 supplement to the extent that a statement contained in this prospectus supplement modifies, supersedes or replaces such statement.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Investor Relations Verastem, Inc.
117 Kendrick Street, Suite 500
Needham, Massachusetts 02494
(781) 292-4200
email address: investors@verastem.com

Copies of these filings are also available, without charge, on the SEC's website at www.sec.gov and on our website at www.verastem.com as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not a part of this prospectus supplement or the accompanying prospectus.

$300,000,000

Common Stock
Preferred Stock
Warrants
Debt Securities

We may offer and sell from time to time, in one or more series or issuances and in an amount and on terms that we will determine at the time of the respective offering, any combination, up to $300,000,000 in the aggregate, of the securities described in this prospectus.

We will provide specific terms of any offering in a supplement to this prospectus. We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and any amendments or prospectus supplements 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 and their compensation will be described in the applicable prospectus supplement.

Our common stock is listed on The Nasdaq Capital Market under the symbol "VSTM." On August 11, 2025, the last reported sale price of our common stock par value $0.0001 per share was $7.70 per share.

Investing in our securities involves a high degree of risk. Before making an investment decision, please read the information under the heading. See "Risk Factors" on page 4 of this prospectus, in any applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus.

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.

Prospectus dated August 15, 2025

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
ABOUT THE COMPANY	3
RISK FACTORS	4
FORWARD-LOOKING STATEMENTS	5
USE OF PROCEEDS	7
PLAN OF DISTRIBUTION	8
DESCRIPTION OF COMMON STOCK	10
DESCRIPTION OF PREFERRED STOCK	11
DESCRIPTION OF WARRANTS	12
DESCRIPTION OF DEBT SECURITIES	13
WHERE YOU CAN FIND MORE INFORMATION	21
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	22
LEGAL MATTERS	23
EXPERTS	23

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the "SEC"), under the Securities Act of 1933, as amended (the "Securities Act"), using a "shelf" registration process. Under this shelf registration process, we may from time to time offer to sell any combination of the securities described in this prospectus in one or more offerings for an aggregate offering amount of up to $300,000,000. Each time we sell securities under this prospectus, we will provide a prospectus supplement and, if necessary, a free writing prospectus, that will contain specific information about the terms of that offering. The prospectus supplement and, if necessary, a free writing prospectus, may also add to, update or change information contained in this prospectus. Accordingly, to the extent inconsistent, the information in this prospectus will be deemed to be modified or superseded by any inconsistent information contained in a prospectus supplement or a free writing prospectus. You should read this prospectus and the applicable prospectus supplement and any free writing prospectus carefully, including all documents incorporated herein and therein by reference, together with the additional information described below under "Where You Can Find More Information" before making an investment in our securities.

This prospectus does not include all of the information that is in the registration statement. We omitted certain parts of the registration statement from this prospectus as permitted by the SEC. We refer you to the registration statement and its exhibits for additional information about us and the securities that may be sold under this prospectus.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement or any free writing prospectus provided in connection with an offering. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement. This prospectus and the accompanying prospectus supplement, if any, 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 and the accompanying prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and any accompanying prospectus supplement, if any, is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered or securities are sold on a later date. Our business, financial condition, results of operations and prospects may have changed since those dates.

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

References in this prospectus to "Verastem," the "Company," "we," "us," "our" or similar terms refer to Verastem, Inc. and our subsidiaries on a consolidated basis, as appropriate, unless we state otherwise or the context otherwise requires. The phrase "this prospectus" refers to this prospectus and any applicable prospectus supplement, unless the context otherwise requires.

Trademarks and Tradenames

The Verastem name and logo are our trademarks. This prospectus and any applicable prospectus supplement and documents incorporated by reference herein and therein contain references to our trademarks and to trademarks belonging to other entities. Each of the other trademarks, trade names and service marks included in this prospectus belongs to its respective holder. Solely for convenience, trademarks, trade names and service marks referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate in any

way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks, trade names and service marks. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

ABOUT THE COMPANY

We are a biopharmaceutical company committed to the development and commercialization of new medicines to improve the lives of patients diagnosed with ras sarcoma (“RAS”)/ mitogen activated pathway kinase (“MAPK”) pathway-driven cancers. We market AVMAPKI FAKZYNJA CO-PACK (avutometinib capsules; defactinib tablets) in the United States. Our pipeline is focused on novel small molecule drugs that inhibit critical signaling pathways in cancer that promote cancer cell survival and tumor growth, including rapidly accelerated fibrosarcoma (“RAF”)/ mitogen-activated protein kinase kinase (“MEK”) inhibition, focal adhesion kinase (“FAK”) inhibition and Kirsten rat sarcoma viral oncogene homolog (“KRAS”) G12D inhibition.

On May 8, 2025, the U.S. Food and Drug Administration (the “FDA”) approved AVMAPKI FAKZYNJA CO-PACK for the treatment of adult patients with KRAS mutant (“KRAS mt”) recurrent low grade serous ovarian cancer (“LGSOC”) who received prior systemic therapy. The KRAS mt recurrent LGSOC indication has been granted approval by the FDA under the accelerated approval pathway based on the tumor response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial. We intend to initiate discussions with other global regulatory authorities, including those in Europe and Japan with the objective of ultimately seeking approval for the combination therapy in additional regions.

AVMAPKI (avutometinib) inhibits MEK kinase activity while also blocking the compensatory reactivation of MEK by upstream RAF. RAF and MEK proteins are regulators of the RAS/RAF/MEK/ extracellular-signal-regulated-kinase (“ERK”) MAPK pathway. Blocking RAF and/or MEK activates FAK, a key mediator of drug resistance. FAKZYNJA (defactinib) is a FAK inhibitor and together, the avutometinib and defactinib combination is designed to provide a more complete blockade of the signaling that drives the growth and drug resistance of RAS/MAPK pathway-dependent tumors.

Avutometinib, alone or in combination with defactinib, has received orphan drug designation for the treatment of all patients with LGSOC in the United States. Defactinib has received orphan drug designation in ovarian cancer in the United States, the European Union, and Australia. In addition, the FDA granted orphan drug designation to avutometinib, in combination with defactinib, for the treatment of pancreatic cancer.

Our principal executive offices are located at 117 Kendrick Street, Suite 500, Needham, MA 02494, and our telephone number is (781) 292-4200. Our website address is: www.verastem.com. We have included our website address as a factual reference and do not intend it to be an active link to our website. The information that can be accessed through our website is not part of this prospectus, and investors should not rely on any such information in deciding whether to purchase our securities.

RISK FACTORS

Investing in our securities involves a high degree of risk. See "Item 1A — Risk Factors" in our most recent Annual Report on Form 10-K incorporated by reference in this prospectus and in any subsequent Quarterly Report on Form 10-Q and the "Risk Factors" section in the applicable prospectus supplement for a discussion of the factors you should carefully consider before deciding to purchase our securities. Before making a decision about investing in our securities, you should carefully consider these risks as well as other information we include or incorporate by reference into this prospectus and the applicable prospectus supplement. The risks and uncertainties we have described are not the only ones facing our Company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations, operating results and financial condition. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities. The discussion of risks includes or refers to forward-looking statements; you should read the explanation of the qualifications and limitations on such forward-looking statements discussed elsewhere in this prospectus.

FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the other documents we have filed with the SEC that are incorporated herein by reference, contain forward-looking statements.

These forward-looking statements generally can be identified by the use of words such as “anticipate,” “expect,” “plan,” “could,” “may,” “believe,” “estimate,” “forecast,” “goal,” “potentially,” “project,” and other words of similar meaning. All statements, other than statements related to present facts or current conditions or historical facts, contained incorporated by reference into this prospectus, are forward-looking statements, including statements regarding our strategy, future operations, future financial position, including our ability to continue as a going concern through one year from the date of the financial statements for the quarter ended June 30, 2025, future revenues, projected costs, prospects, plans and objectives of management. Such statements relate to, among other things, the commercial success of our marketed product AVMAPKI FAKZYNJA CO-PACK, the development and activity of our programs and product candidates, avutometinib (RAF MEK program) and defactinib (FAK program), the structure and potential clinical value of our completed, planned and pending clinical trials, including the RAMP 201, RAMP 203, RAMP 205 and RAMP 301 trials; the timing of commencing and completing trials, including topline data reports, our interactions with regulators; the timeline and indications for clinical development, regulatory submissions and the potential for and timing of commercialization of our product candidates; the potential for additional development programs involving the Company’s lead compound and the potential market opportunities thereof; the expected outcome and benefits of our collaboration with GenFleet Therapeutics (Shanghai), Inc. (“GenFleet”) and the estimated addressable markets for, and anticipated market opportunities of our drug candidates.

Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement. Applicable risks and uncertainties include the risks and uncertainties, among other things, regarding: the success in the development and potential commercialization of our product candidates, including avutometinib in combination with other compounds, including defactinib, LUMAKRAS® and others; the uncertainties inherent in research and development, such as negative or unexpected results of clinical trials; the occurrence or timing of applications for our product candidates that may be filed with regulatory authorities in any jurisdictions; whether and when regulatory authorities in any jurisdictions may approve applications that may be filed for our product candidates and, if approved, whether our product candidates will be commercially successful in such jurisdictions; the impact of current and future healthcare reforms, including those affecting the delivery of or payment for healthcare products and services; our ability to obtain, maintain and enforce patent and other intellectual property protection for our product candidates; the scope, timing, and outcome of any legal proceedings; decisions by regulatory authorities regarding trial design, labeling and other matters that could affect the timing, availability or commercial potential of our product candidates; whether preclinical testing of our product candidates and preliminary or interim data from clinical trials will be predictive of the results or success of ongoing or later clinical trials; that the timing, scope and rate of reimbursement for our product candidates is uncertain; actions or advice of regulatory agencies and our ability to obtain and maintain regulatory approval for AVMAPKI FAKZYNJA CO-PACK; that the market opportunities of AVMAPKI FAKZYNJA CO-PACK are based on internal and third-party estimates which may prove to be incorrect; that third-party payors (including government agencies) may not reimburse; that there may be competitive developments affecting our product candidates; that data may not be available when expected; that enrollment of clinical trials may take longer than expected; risks associated with preliminary and interim data, which may not be representative of more mature data, including with respect to interim duration of therapy data; that our product candidates may cause adverse safety events and/or unexpected concerns may arise from additional data or analysis, or result in unmanageable safety profiles as compared to their levels of efficacy; that we may be unable to successfully validate, develop and obtain regulatory approval for companion diagnostic tests for our product candidates that require or would commercially benefit from such tests, or experience significant delays in doing so; that we may not be able to expand the approved indication for AVMAPKI FAKZYNJA CO-PACK; that our product candidates may experience manufacturing or supply interruptions or failures; that any of our third party contract research organizations, contract manufacturing organizations, clinical sites, or contractors, among others, who we rely on may fail to fully perform; that we face substantial competition, which may result in others developing or commercializing products before or more successfully than we do which could result in reduced market

share or market potential for our product candidates; that we may be unable to successfully initiate or complete the clinical development and eventual commercialization of our product candidates; that the development and commercialization of our product candidates may take longer or cost more than planned, including as a result of conducting additional studies or our decisions regarding execution of such commercialization; that we may not have sufficient cash to fund our contemplated operations, including certain of our product development programs; that we may not attract and retain high quality personnel; that we or Chugai Pharmaceutical, Co. Ltd. may fail to fully perform under the avutometinib license agreement; that we or Secura Bio, Inc. ("Secura") may fail to fully perform under the asset purchase agreement with Secura, including in relation to milestone payments; that we may not see a return on investment on the payments we have and may continue to make pursuant to the collaboration and option agreement with GenFleet or that GenFleet may fail to fully perform under the agreement; that we may not be able to establish new or expand on existing collaborations or partnerships, including with respect to in-licensing of our product candidates, on favorable terms, or at all; that we may be unable to obtain adequate financing in the future through product licensing, co-promotional arrangements, public or private equity, debt financing or otherwise; that we may not pursue or submit regulatory filings for our product candidates; and that our product candidates will not receive regulatory approval, become commercially successful products, or result in new treatment options being offered to patients. Other risks and uncertainties include those identified under the heading "Risk Factors" contained in this in our Annual Report on Form 10-K for the year ended December 31, 2024, as filed with the SEC on March 20, 2025, each incorporated by reference in this prospectus, in any subsequent filings with the SEC, and in the applicable "Risk Factors" section in the applicable prospectus supplement. See "Where You Can Find More Information."

As a result of these and other factors, we may not achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. The forward-looking statements contained in this prospectus reflect our views as of the date hereof. We do not assume and specifically disclaim any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. Our business is subject to substantial risks and uncertainties, including those referenced above. Investors, potential investors, and others should give careful consideration to these risks and uncertainties.

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement, in connection with an offering of securities pursuant to this prospectus, we currently intend to use the net proceeds we receive from the sale of any securities offered by us under this prospectus primarily for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, commercial expenditures, milestone payments under in-license agreements, and possible acquisitions. Additional information on the use of net proceeds we receive from the sale of securities covered by this prospectus may be set forth in the prospectus supplement relating to the specific offering.

PLAN OF DISTRIBUTION

We are registering securities, with an aggregate offering price not to exceed $300,000,000, to be sold by us under a "shelf" registration process.

If we offer any securities under this prospectus, we will amend or supplement this prospectus by means of an accompanying prospectus supplement setting forth the specific terms and conditions and other information about that offering as is required or necessary.

We may sell the securities in any of the following ways (or in any combination thereof) from time to time:

- to or through one or more underwriters;
- through dealers, who may act as agents or principal (including a block trade in which a broker or dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction);
- through one or more agents;
- through registered direct offerings;
- as part of a collaboration with a third party;
- as part of an acquisition or merger with a third party;
- through at-the-market issuances;
- in privately negotiated transactions; or
- directly to purchasers or to a single purchaser.

The distribution of the securities by us 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.

The prospectus supplement will describe the terms of the offering of the securities, including the following, as applicable:

- the terms of the securities being offered, including the public offering price of the securities and the proceeds to us;
- the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them;
- any underwriting discounts and commissions or agency fees and other items constituting underwriters' or agents' compensation;
- any options under which underwriters may purchase additional securities from us;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchanges on which the securities may be listed.

Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

We may authorize underwriters, dealers 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 a specified date in the future. 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 each applicable 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 be subject only to those conditions set forth in each applicable prospectus supplement, and each prospectus supplement will set forth any commissions we pay for solicitation of these contracts.

We may indemnify agents, underwriters, dealers, their affiliates, or other third parties who participate in the distribution of securities against certain liabilities, including liabilities under the Securities Act, and agree to contribute to payments which these agents, underwriters, dealers, or other third parties may be required to make. Agents, underwriters, dealers and such other third parties may be customers of, engage in transactions with, or perform services for us in the ordinary course of business. We may also use underwriters or such other third parties with whom we have a material relationship. We will describe the nature of any such relationship in the applicable prospectus supplement.

One or more firms, referred to as “remarketing firms,” may also offer or sell the securities, if a prospectus supplement so indicates, in connection with a remarketing arrangement upon their purchase. Remarketing firms will act as principals for their own accounts or as our agents. These remarketing firms will offer or sell the securities in accordance with the terms of the securities. Each prospectus supplement will identify and describe any remarketing firm and the terms of its agreement, if any, with us and will describe the remarketing firm’s compensation. Remarketing firms may be deemed to be underwriters in connection with the securities they remarket. Remarketing firms may be entitled under agreements that may be entered into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may engage in transactions with or perform services for us in the ordinary course of business.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale. Any underwriters involved in the sale of the securities may qualify as “underwriters” within the meaning of Section 2(a)(11) of the Securities Act. In addition, the underwriters’ commissions, discounts or concessions may qualify as underwriters’ compensation under the Securities Act and the rules of the Financial Industry Regulatory Authority.

Our common stock is listed on The Nasdaq Capital Market. Underwriters may make a market in our common stock, but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the development, maintenance or liquidity of any trading market for the securities.

Certain persons participating in an offering may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with rules and regulations under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a short covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

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

To the extent required, this prospectus may be amended and/or supplemented from time to time to describe a specific plan of distribution.

DESCRIPTION OF COMMON STOCK

The description of our common stock is incorporated by reference to Exhibit 4.2 of our Annual Report on Form 10-K for the year ended December 31, 2024, as filed with the SEC on March 20, 2025, including any amendments or reports filed for the purpose of updating such description.

DESCRIPTION OF PREFERRED STOCK

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to issue up to 5,000,000 shares of our preferred stock, par value $0.0001 per share, in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of the holders of common stock until the board of directors determines the specific rights of the holders of preferred stock. However, effects of the issuance of preferred stock include restricting dividends on common stock, diluting the voting power of common stock, impairing the liquidation rights of common stock, and making it more difficult for a third party to acquire us, which could have the effect of discouraging a third party from acquiring, or deterring a third party from paying a premium to acquire, a majority of our outstanding voting stock.

If we offer any additional specific class or series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of the Company; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the Company.

The preferred stock offered by this prospectus, when issued, will not have, or be subject to, any preemptive or similar rights.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in each applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the applicable warrant agreements and the applicable prospectus supplement for the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that class or series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of our debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

DESCRIPTION OF DEBT SECURITIES

We may issue the debt securities offered by this prospectus and any accompanying prospectus supplement under an indenture to be entered into between us and the trustee identified in the applicable prospectus supplement. The terms of the debt securities will include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as in effect on the date of the indenture. We have filed a copy of the form of indenture as an exhibit to the registration statement in which this prospectus is included. The indenture will be subject to and governed by the terms of the Trust Indenture Act of 1939.

We may offer debt securities as described in this prospectus that, unless otherwise specified in the applicable prospectus supplement, will represent direct, unsecured obligations of the Company and will rank equally with all of our other unsecured indebtedness.

The applicable prospectus supplement will describe the terms and features of any debt securities which we may offer, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The following description and any description of debt securities in the applicable prospectus supplement may not be complete and is subject to, and are qualified in their entirety by reference to, the indenture, any supplemental indentures or forms of debt securities, in each case that we will file with the SEC in connection with a public offering of debt securities.

General

We may issue the debt securities in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will describe the particular terms of each series of debt securities in the applicable prospectus supplement relating to that series, which we will file with the SEC.

The prospectus supplement will set forth, to the extent required, the following terms of the debt securities in respect of which the prospectus supplement is delivered:

- the title of the series (which shall distinguish the debt securities of that particular series from the debt securities of any other series);
- any limit upon the aggregate principal amount of the debt securities of the series which may be authenticated and delivered under the indenture;
- the price or prices (expressed as a percentage of the principal amount thereof) at which the series of debt securities will be issued;
- the date or dates on which principal of the securities of the series is payable;
- the rate or rates (which may be fixed or variable) per annum or, if applicable, the method used to determine such rate or rates (including, but not limited to, any commodity, commodity index, stock exchange index or financial index) at which the debt securities of the series shall bear interest, if any, the date or dates from which such interest, if any, shall accrue, the date or dates on which such interest, if any, shall commence and be payable and any regular record date for the interest payable on any interest payment date;
- the place or places where the principal, interest and premium, if any, on the debt securities of the series are payable, or the method of such payment, if by wire transfer, mail or other means;
- if applicable, the period or periods within which, the price or prices at which and the terms and conditions upon which the debt securities of the series may be redeemed, in whole or in part, at our option;
- our obligation, if any, to redeem or purchase the debt securities of the series pursuant to any sinking fund or analogous provisions or at the option of a holder thereof, and the period or periods within which, the price or prices at which and the terms and conditions upon which debt securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;
- the dates, if any, on which and the price or prices at which the debt securities of the series will be repurchased by us at the option of the holders thereof, and other detailed terms and provisions of such repurchase obligations;

- if other than denominations of $1,000 and any integral multiple thereof, the denominations in which the debt securities of the series shall be issuable;
- the forms of the debt securities of the series in bearer (if to be issued outside of the United States of America) or fully registered form (and, if in fully registered form whether the debt securities will be issuable as global securities;
- if other than the principal amount thereof, the portion of the principal amount of the debt securities of the series that shall be payable upon declaration of acceleration of the maturity thereof;
- the currency of denomination of the debt securities of the series, which may be dollars or any foreign currency, and the agency or organization, if any, responsible for overseeing such composite currency;
- the designation of the currency, currencies or currency units in which payment of the principal of, and interest and premium, if any, on the debt securities of the series will be made;
- if payments of principal of, or interest or premium, if any, on the debt securities of the series are to be made in one or more currencies or currency units other than the that or those in which such securities are denominated are, the manner in which the exchange rate with respect to such payments will be determined;
- the manner in which the amounts of payment of principal of, or interest and premium, if any, on the debt securities of the series will be determined if such amounts may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index;
- the provisions, if any, relating to any collateral provided for the debt securities of the series;
- any addition to or change in the covenants in the indenture which applies to the debt securities of the series;
- any addition to or change in the events of default which applies to any debt securities of the series, and any change in the right of the trustee or the requisite holders of such debt securities to declare the principal amount thereof due and payable;
- the terms and conditions, if any, for conversion of the debt securities into or exchange of the debt securities for shares of common stock or preferred stock of the Company that apply to debt securities of the series;
- any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents with respect to debt securities of such series;
- the terms and conditions, if any, upon which the debt securities shall be subordinated in right of payment to other indebtedness of the Company;
- if applicable, that the debt securities of the series, in whole or any specified part, shall be defeasible; and
- any other terms of the debt securities of the series (which terms shall not be inconsistent with the provisions of the indenture, except as permitted by the indenture, but which may modify or delete any provision of the indenture insofar as it applies to such series).

We may issue discount debt securities that provide for an amount less than the stated principal amount to be due and payable upon acceleration of the maturity of such debt securities in accordance with the terms of the indenture. We may also issue debt securities in bearer form, with or without coupons. If we issue discount debt securities or debt securities in bearer form, we will describe material U.S. federal income tax considerations and other material special considerations which apply to these debt securities in the applicable prospectus supplement.

We may issue debt securities denominated in or payable in a foreign currency or currencies or a foreign currency unit or units. If we do, we will describe the restrictions, elections, and general tax considerations relating to the debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Exchange and/or Conversion Rights

We may issue debt securities which can be exchanged for or converted into shares of our common stock or preferred stock. If we do, we will describe the terms of exchange or conversion in the applicable prospectus supplement relating to these debt securities.

Transfer and Exchange

We may issue debt securities that will be represented by either:

- "book-entry," which means that there will be one or more global securities registered in the name of a depositary or a nominee of a depositary; or
- "certificated securities," which means that they will be represented by a certificate issued in definitive registered form.

We will specify in the prospectus supplement applicable to a particular offering whether the debt securities offered will be book-entry or certificated securities.

Certificated Debt Securities

If we issue certificated debt securities, a holder may transfer or exchange such debt securities at the trustee's office or at the paying agent's office or agency in accordance with the terms of the indenture. A holder will not be charged a service charge for any transfer or exchange of certificated debt securities but may be required to pay an amount sufficient to cover any tax or other governmental charge payable in connection with such transfer or exchange.

A holder may effect the transfer of certificated debt securities and of the right to receive the principal of, premium, and/or interest, if any, on the certificated debt securities only by surrendering the certificate representing the certificated debt securities and having us or the trustee issue a new certificate to the new holder.

Global Securities

If we decide to issue debt securities in the form of one or more global securities, then we will register the global securities in the name of the depositary for the global securities or the nominee of the depositary, and the global securities will be delivered by the trustee to the depositary for credit to the accounts of the holders of beneficial interests in the debt securities.

The prospectus supplement will describe the specific terms of the depositary arrangement for debt securities of a series that are issued in global form. None of our Company, the trustee, any payment agent or the security registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in a global debt security or for maintaining, supervising or reviewing any records relating to these beneficial ownership interests.

No Protection in the Event of Change of Control

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of debt securities, the debt securities will not contain any provisions that may afford holders of debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Covenants

We will set forth in the applicable prospectus supplement any restrictive covenants applicable to any issue of debt securities.

Consolidation, Merger and Sale of Assets

Unless we indicate otherwise in a prospectus supplement, we will not in any transaction or series of transactions, merge or consolidate with or into, or sell, assign, convey or transfer, lease or otherwise dispose of all or substantially all of our properties and assets, unless:

- either (A) if the transaction or series of transactions is a merger or consolidation, the Company shall be the surviving person of such merger or consolidation, or (B) the person formed by such consolidation or into which the Company is merged or to which the properties and assets of the Company are transferred shall be a corporation or entity treated as a corporation for U.S. federal income tax purposes organized and existing under the laws of the United States of America, any state thereof or the District of Columbia, or a corporation or comparable legal entity treated as a corporation for U.S. federal income tax purposes organized under the laws of a foreign jurisdiction and shall expressly assume by a supplemental indenture executed and delivered to the trustee, in form reasonably satisfactory to the trustee, all of the obligations of the Company (including, without limitation, the obligation to pay the principal of, and premium and interest, if any, on, the securities and the performance of the other covenants) under the indenture as supplemented, and in each case, the indenture shall remain in full force and effect; and
- immediately before and immediately after giving effect to such transaction or series of transactions on a pro forma basis (including, without limitation, any indebtedness incurred or anticipated to be incurred in connection with or in respect of such transaction or series of transactions), no default or event of default shall have occurred and be continuing.

Events of Default

Unless otherwise specified in the applicable prospectus supplement, the following events will be events of default under the indenture with respect to debt securities of any series:

- we default in the payment of any principal of, or premium, if any, on, the debt securities when it becomes due and payable at maturity, upon acceleration, redemption or otherwise;
- we default in the payment of any interest on any debt security of a series when the same becomes due and payable, and the default continues for a period of 30 days;
- we default in observance or performance of any other covenant in the debt securities of a series or the indenture for 60 days after written notice from the trustee or the holders of not less than 25% in the aggregate principal amount of the debt securities of such series then outstanding which notice must specify the default, demand that it be remedied and state that the notice is a “Notice of Default”;
- certain events involving bankruptcy, insolvency or reorganization of Verastem or any of our significant subsidiaries; and
- any other event of default provided for in such series of debt securities as may be specified in the applicable prospectus supplement.

Holders of a majority in principal amount of the debt securities of any series then outstanding have the right to waive any existing default or event of default with respect to such series or compliance with any provision of the indenture (with respect to such series) or the debt securities of such series with written notice to the trustee. Upon any such waiver, such default with respect to such series shall cease to exist, and any event of default with respect to such series arising therefrom shall be deemed to have been cured for every purpose of the indenture; but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto. If an event of default (other than an event of default resulting from certain events of bankruptcy, insolvency or reorganization with respect to the Company) occurs, and is continuing, then the trustee, by written notice, or the holders of not less than 25% in aggregate principal amount of the outstanding debt securities of that series may declare that the entire principal amount, plus the premium, if any, of all the debt securities of that series then outstanding plus accrued and unpaid interest to the date of acceleration are immediately due and payable. At any time after the acceleration, but before a judgment or decree based on such acceleration is obtained by the trustee, the holders of a majority in aggregate principal amount of outstanding debt securities of such series may rescind and annul such acceleration if:

- all existing events of default (other than nonpayment of accelerated principal, premium or interest) have been cured or waived;
- all lawful interest on overdue installments of interest and overdue principal have been paid; and

- the rescission would not conflict with any judgment or decree.

In addition, if the acceleration occurs at any time when we have outstanding indebtedness which is senior to the debt securities, the payment of the principal amount of outstanding debt securities may be subordinated in right of payment to the prior payment of any amounts due under the senior indebtedness, in which case the holders of debt securities will be entitled to payment under the terms prescribed in the instruments evidencing the senior indebtedness and the indenture.

If an event of default resulting from certain events of bankruptcy, insolvency or reorganization with respect to the Company occurs, such principal, premium, if any, and interest amount with respect to all the debt securities of that series shall be due and payable immediately without any declaration or other act on the part of the trustee or the holders of the debt securities of that series.

The holders of a majority in principal amount of the outstanding debt securities of a series will have the right to waive any existing default or compliance with any provision of the indenture or the debt securities of that series and to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, subject to certain limitations specified in the indenture.

No holder of any debt security of a series will have any right to institute any proceeding with respect to the indenture or for any remedy under the indenture, unless:

- the holder gives to the trustee written notice of a continuing event of default with respect to the debt securities of that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the affected series make a written request to the trustee;
- the holder or holders offer to the trustee indemnity satisfactory to the trustee against any loss, liability or expense to be incurred in compliance with such request;
- the trustee does not comply with the request within 60 days after such request; and
- the holders of a majority in aggregate principal amount of the outstanding debt securities of the affected series do not give the trustee a direction inconsistent with such request during such 60-day period.

Modification and Waiver

From time to time, we and the trustee may, without the consent of holders of the debt securities of one or more series, amend the indenture or the debt securities of one or more series, or supplement the indenture, for certain specified purposes, including:

- to provide that the surviving entity following a change of control of Verastem permitted under the indenture will assume all of our obligations under the indenture and debt securities;
- to provide for certificated debt securities in addition to uncertificated debt securities;
- to comply with any requirements of the SEC under the Trust Indenture Act of 1939;
- to cure any mistake, ambiguity, defect or inconsistency, or make any other change that does not materially and adversely affect the rights of any holder;
- to provide for the issuance of and establish the form and terms and conditions of debt securities of any series as permitted by the indenture; and
- to evidence and provide for the acceptance of the appointment of a successor trustee under the indenture with respect to one or more series and to add to or change any of the provisions of the indenture as shall be necessary to provide for or facilitate the administration of the trusts by more than one trustee.

From time to time we and the trustee may, with the consent of holders of not less than a majority of the aggregate principal amount of an outstanding series of debt securities, amend or supplement the indenture or the debt securities series, or waive compliance in a particular instance by us with any provision

of the indenture or the debt securities. We may not, however, without the consent of each holder affected by such action, modify or supplement the indenture or the debt securities or waive compliance with any provision of the indenture or the debt securities in order to:

- reduce the amount of debt securities whose holders must consent to an amendment, supplement, or waiver to the indenture or such debt security;
- reduce the rate of or change the time for payment of interest on any of the debt securities
- reduce the principal of or change the stated maturity of the debt securities, or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation;
- make any debt security payable in money other than that stated in the debt security;
- change the amount or time of any payment required by the debt securities or reduce the premium payable upon any redemption of the debt securities, or change the time before which no such redemption may be made;
- waive a default or event of default in the payment of the principal of, or interest or premium, if any, on any debt securities (except a rescission of acceleration of the debt securities of any series by the holders of at least a majority in principal amount of the outstanding debt securities of such series and a waiver of the payment default that resulted from such acceleration);
- waive a redemption payment with respect to any debt securities or change any provision with respect to redemption of debt securities;
- take any other action otherwise prohibited by the indenture to be taken without the consent of each holder affected by the action; or
- make any changes to the above provisions or the acceleration provisions of the indenture, except to increase any percentage of debt securities the holders of which must consent to any matter.

Defeasance of Debt Securities and Certain Covenants in Certain Circumstances

The indenture permits us, at any time, to elect to discharge our obligations with respect to one or more series of debt securities by following certain procedures described in the indenture. These procedures will allow us either:

- to defease and be discharged from any and all of our obligations with respect to any debt securities except for the following obligations (which discharge is referred to as “legal defeasance”):
  - (1) to replace temporary or mutilated, destroyed, lost or stolen debt securities;
  - (2) the rights, powers, trusts, duties and immunities of the trustee; or
  - (3) to maintain an office or agency in respect of the debt securities and to hold monies for payment in trust; or
- to be released from our obligations with respect to the debt securities under certain covenants contained in the indenture, as well as any additional covenants which may be contained in an applicable supplemental indenture (which release is referred to as “covenant defeasance”).

In order to exercise either defeasance option, we must irrevocably deposit with the trustee or other qualifying trustee, in trust for that purpose:

- money;
- U.S. Government Obligations (as described below) or Foreign Government Obligations (as described below) which through the scheduled payment of principal and interest in accordance with their terms will provide, not later than the due date of any payment, money; or
- a combination of money and/or U.S. Government Obligations and/or Foreign Government Obligations sufficient in the written opinion of a nationally-recognized firm of independent accountants to provide money;

which in each case specified above, provides an amount sufficient to pay the principal of, premium, if any, and interest, if any, on the debt securities of the series, on the scheduled due dates or on a selected date of redemption in accordance with the terms of the indenture.

In addition, defeasance may be effected only if, among other things:

- in the case of either legal or covenant defeasance, we deliver to the trustee an opinion of counsel, as specified in the indenture;
- in the case of legal defeasance, we deliver to the trustee an opinion of counsel stating that we have received from, or there has been published by, the Internal Revenue Service a ruling to the effect that, or there has been a change in any applicable federal income tax law with the effect that or there has been a change in any applicable U.S. Federal income tax law with the effect that, and such opinion shall confirm that, the holders of the outstanding debt securities of such series or persons will not recognize income, gain or loss for U.S. federal income tax purposes solely as a result of such legal defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner, including as a result of prepayment, and at the same times as would have been the case if legal defeasance had not occurred;
- in the case of covenant defeasance, we deliver to the trustee an opinion of counsel to the effect that the holders of the outstanding debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of covenant defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if covenant defeasance had not occurred; and
- certain other conditions described in the indenture are satisfied.

If we fail to comply with our remaining obligations under the indenture and any applicable supplemental indenture after a covenant defeasance of the indenture and any applicable supplemental indenture, and the debt securities are declared due and payable because of the occurrence of any undefeased event of default, the amount of money and/or U.S. Government Obligations and/or Foreign Government Obligations on deposit with the trustee could be insufficient to pay amounts due under the debt securities of the affected series at the time of acceleration. We will, however, remain liable in respect of these payments.

The term “U.S. Government Obligations” as used in the above discussion means direct non-callable obligations of or non-callable obligations guaranteed by the United States of America for the payment of which obligation or guarantee the full faith and credit of the United States of America is pledged.

The term “Foreign Government Obligations” as used in the above discussion means, with respect to Securities that are denominated in a foreign currency (i) direct obligations of the government that issued or caused to be issued such currency for the payment of which obligations its full faith and credit is pledged or (ii) obligations of a person controlled or supervised by or acting as an agency or instrumentality of such government the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by such government, which in either case under clauses (i) and (ii), are not callable or redeemable at the option of the issuer thereof.

Regarding the Trustee

We will identify the trustee with respect to any series of debt securities in the prospectus supplement relating to the applicable debt securities. You should note that if the trustee becomes a creditor of Verastem, the indenture and the Trust Indenture Act of 1939 limit the rights of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim, as security or otherwise. The trustee and its affiliates may engage in, and will be permitted to continue to engage in, other transactions with us and our affiliates. If, however, the trustee acquires any “conflicting interest” within the meaning of the Trust Indenture Act of 1939, it must eliminate such conflict or resign.

The holders of a majority in principal amount of the then outstanding debt securities of any series may direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee. If an event of default occurs and is continuing, the trustee, in the exercise of its rights and powers, must use the degree of care and skill of a prudent person under the same circumstances in the conduct of

his or her own affairs. Subject to that provision, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of the debt securities, unless they have offered to the trustee indemnity or security against the costs, expenses and liabilities which may be incurred therein or thereby.

Governing Law

The indenture and the debt securities, including any claim or controversy arising out of or relating to the indenture or the securities, will be governed by the laws of the State of New York.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC, including us. The address of the SEC website is www.sec.gov.

We maintain a website at www.verastem.com. Information contained in, or accessible through, our website is not a part of, and is not incorporated into, this prospectus, and you should not consider it part of this prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus certain information we file with it, which means that we can disclose important information about us by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the SEC will automatically update and supersede information in this prospectus. We incorporate by reference into this prospectus the documents listed below and any future filings, including all filings made after the date of the filing of the registration statement of which this prospectus is part and prior to the effectiveness of such registration statement, made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except for information "furnished" under Items 2.02, 7.01 or 9.01 on Form 8-K or other information "furnished" to the SEC which is not deemed filed and not incorporated in this prospectus, until the termination of the offering of securities described in the applicable prospectus supplement. We hereby incorporate by reference the following documents:

- our Annual Report on Form 10-K for the year ended December 31, 2024, as filed with the SEC on March 20, 2025;
- our Quarterly Reports on Form 10-Q for the quarter ended March 30, 2025, as filed with the SEC on May 13, 2025, and for the quarter ended June 30, 2025, as filed with the SEC on August 7, 2025;
- our Current Reports on Form 8-K filed with the SEC on January 13, 2025, January 21, 2025, January 23, 2025, March 20, 2025, April 25, 2025, May 8, 2025, May 23, 2025, and June 2, 2025;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2024 from our Definitive Proxy Statement on Schedule 14A for the 2025 Annual Meeting of Stockholders, as filed with the SEC on April 8, 2025; and
- the description of our common stock, which is in our Registration Statement on Form 8-A, dated January 23, 2012, as supplemented by the description of our common stock and preferred stock contained in Exhibit 4.2 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, filed with the SEC on March 20, 2025.

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

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Investor Relations
Verastem, Inc.
117 Kendrick Street, Suite 500
Needham, Massachusetts 02494
(781) 292-4279
email address: investors@verastem.com

Copies of these filings are also available, without charge, on the SEC's website at www.sec.gov and on our website at www.verastem.com as soon as reasonably practicable after they are filed electronically with the SEC. The information contained on our website is not a part of this prospectus.

LEGAL MATTERS

The validity of the issuance of the securities offered pursuant to this prospectus will be passed upon for us by Ropes & Gray LLP, Boston, Massachusetts. The validity of any securities will be passed upon for any underwriters or agents by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Verastem, Inc. appearing in Verastem, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2024, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

30,937,500 Shares of Common Stock
Pre-Funded Warrants to Purchase up to 312,503 Shares of Common Stock

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

Jefferies **Guggenheim Securities** **Cantor**

Lead Manager

B. Riley Securities

October 14, 2026