

PROSPECTUS



Up to 9,534,164 Shares of Common Stock

This prospectus relates to the offer and resale from time to time by the selling stockholders named in this prospectus, referred to as the selling stockholders, of up to 9,534,164 shares of common stock, par value \$0.001 per share, of Tempest Therapeutics, Inc. (the “Shares”), consisting of (i) up to 3,105,591 shares of our common stock issuable upon the exercise of pre-funded warrants (the “Pre-Funded Warrants”), (ii) up to 3,105,591 shares of our common stock issuable upon the exercise of Series C warrants (the “Series C Warrants”), (iii) up to 3,105,591 shares of our common stock issuable upon the exercise of Series D warrants (the “Series D Warrants,” and, together with the Series C Warrants, the “Common Warrants”), and (iv) up to 217,391 shares of our common stock that are issuable upon the exercise of certain placement agent warrants (the “Placement Agent Warrants,” and together with the Pre-Funded Warrants and the Common Warrants, the “Warrants”) issued to designees of H.C. Wainwright & Co., LLC, our placement agent (the “Placement Agent”) in connection with the private transaction pursuant to which we issued the Warrants.

Our registration of Shares covered by this prospectus does not mean that the selling stockholders will sell any Shares. The Pre-Funded Warrants and the Common Warrants were issued and sold to certain of the selling stockholders named herein in a private placement pursuant to a securities purchase agreement, dated September 11, 2026 (the “Purchase Agreement”), by and among us and the parties named therein, in a transaction more fully described in the section titled “Prospectus Summary.”

We are not selling any common stock or other securities under this prospectus, and will not receive any proceeds from the sale of the Shares by the selling stockholders; however, we will receive proceeds from the exercise of any Warrants for cash.

The selling stockholders may offer and sell or otherwise dispose of the Shares described in this prospectus from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. The selling stockholders will bear all underwriting fees, commissions and discounts, if any, attributable to the sales of Shares and any transfer taxes. We will bear all other costs, expenses and fees in connection with the registration of the Shares. See “Plan of Distribution” beginning on page 10 of this prospectus for more information about how the selling stockholders may sell or dispose of their respective Shares.

Our common stock is listed on The Nasdaq Capital Market under the trading symbol “TPST”. On September 24, 2026, the closing price of our common stock as reported on The Nasdaq Capital Market was \$0.85 per share.

Investing in our common stock involves a high degree of risk. You should carefully read the information under “Risk Factors” on page 4 of this prospectus and under similar headings in any amendment or supplement to this prospectus or in any filing with the Securities and Exchange Commission (the “SEC”) that is incorporated by reference herein.

We are a “smaller reporting company” under applicable SEC rules and a non-accelerated filer. As such, we are eligible for reduced public company reporting requirements. See “Prospectus Summary—Implications of Being a Smaller Reporting Company and a Non-Accelerated Filer” for more information.

Neither the SEC nor any state securities commission has approved or disapproved of these securities, passed upon the accuracy or adequacy of this prospectus, or determined if this prospectus or any prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is October 1, 2026.

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	ii
<u>PROSPECTUS SUMMARY</u>	1
<u>RISK FACTORS</u>	4
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	5
<u>USE OF PROCEEDS</u>	7
<u>SELLING STOCKHOLDERS</u>	8
<u>PLAN OF DISTRIBUTION</u>	10
<u>LEGAL MATTERS</u>	12
<u>EXPERTS</u>	12
<u>WHERE YOU CAN FIND ADDITIONAL INFORMATION</u>	12
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	13

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC. Under this registration statement, the selling stockholders may sell from time to time in one or more offerings the Shares offered pursuant to this prospectus. Information about the selling stockholders may change over time. When the selling stockholders sell Shares under this prospectus, we will, if required by law, provide a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add to, update, modify or replace information contained in this prospectus. If a prospectus supplement is provided and the description of the offering in the prospectus supplement varies from the information in this prospectus, you should rely on the information in the prospectus supplement. You should carefully read this prospectus and any accompanying prospectus supplement along with all of the information incorporated by reference herein and therein, before making an investment decision.

You should rely only on the information contained or incorporated by reference in this prospectus or any applicable prospectus supplement. Neither we nor the selling stockholders have authorized anyone to provide you with information other than the information contained or incorporated by reference in this prospectus and your reliance on any unauthorized information or representation is at your own risk. This prospectus may be used only in jurisdictions where offers and sales of these securities are permitted. You should assume that the information appearing in this prospectus is accurate only as of the date of this prospectus and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, or any sale of our common stock. Our business, financial condition and results of operations may have changed since those dates.

Throughout this prospectus, the terms “we,” “us,” “our,” and the “company” refer to Tempest Therapeutics, Inc., a Delaware corporation, and its subsidiaries. The term “common stock” refers to common stock of Tempest Therapeutics, Inc., par value \$0.001 per share.

PROSPECTUS SUMMARY

This prospectus summary highlights selected information appearing elsewhere in this prospectus and in documents we file with the SEC that are incorporated by reference in this prospectus. This summary may not contain all of the information that may be important to you. To understand this offering fully, you should read this entire prospectus carefully, including the information incorporated by reference herein, the information set forth under the heading “Risk Factors” and our financial statements and the related notes thereto incorporated by reference in this prospectus.

Company Overview

We are a clinical-stage biotechnology company advancing a pipeline of advanced chimeric antigen receptor T-cell (“CAR-T”) product candidates, including our lead program, TPST-4003, a dual-targeting CD19/B-cell maturation antigen (“BCMA”) in vivo CAR-T product candidate, which we are developing for indications in immunology and oncology. In February 2026, we expanded our pipeline through a strategic transaction under which we acquired rights to a dual-targeting CAR-T platform, which included product candidates with the potential to treat certain blood cancers, solid tumors and immunology indications, including TPST-2003, an autologous CD19/BCMA CAR-T therapy currently in clinical development for relapsed or refractory multiple myeloma and the rare disease, POEMS syndrome.

Our mission is to develop therapeutic products with the potential to address high unmet medical needs by identifying promising clinical-stage candidates and advancing their development to create products that will improve patients’ lives.

Private Placement

On September 11, 2026, we entered into the Purchase Agreement with an institutional investor (the “Investor”), pursuant to which we issued and sold in a private placement (the “Private Placement”) the Pre-Funded Warrants to purchase up to 3,105,591 shares of common stock accompanied by (i) the Series C Warrants to purchase up to 3,105,591 shares of common stock and (ii) the Series D Warrants to purchase up to 3,105,591 shares of common stock. The combined purchase price per Pre-Funded Warrant and accompanying Common Warrants was \$0.804. The Private Placement closed on September 15, 2026.

Pursuant to the Purchase Agreement, we agreed to seek, within 90 days following the date of the Purchase Agreement, approval from our stockholders for the issuance of the Shares issuable upon exercise of the Common Warrants (the “Stockholder Approval”). The Common Warrants have an exercise price of \$0.805 per share and will become exercisable on the effective date of Stockholder Approval (the “Stockholder Approval Date”). The Series C Warrants have a term of six years from the later of the Stockholder Approval Date and the Effectiveness Date (as defined below). The Series D Warrants have a term of three years from the later of the Stockholder Approval Date and the Effectiveness Date. The Pre-Funded Warrants became exercisable immediately following the closing date of the Private Placement, have an exercise price of \$0.001 per share, and may be exercised at any time until exercised in full. The Pre-Funded Warrants and the Common Warrants contain customary adjustment provisions for stock dividends, stock splits, pro rata distributions and similar events, and beneficial ownership limitations of 9.99% with respect to the Pre-Funded Warrants or 4.99% (or, upon election of the holder, 9.99%) with respect to the Common Warrants. If at the time of exercise, there is no effective registration statement registering, or the prospectus contained therein is not available for, the resale of the Shares issuable upon exercise of the Common Warrants, then the holder thereof may elect to exercise such warrants on a cashless basis. The holder of Pre-Funded Warrants may at any time elect to exercise such warrants on a cashless basis.

On September 11, 2026, we entered into a registration rights agreement with the Investor (the “Registration Rights Agreement”) whereby we agreed to file a registration statement covering the resale of the Shares issuable upon exercise of the Pre-Funded Warrants and Common Warrants no later than 15 calendar days following the date of the Registration Rights Agreement, and to use reasonable best efforts to have the registration statement declared effective within 45 calendar days, and in no event later than 75 calendar days in the event of a “full review” by the SEC (the “Effectiveness Date”), in each case following the date of the Registration Rights Agreement. We are filing the registration statement of which this prospectus forms a part in satisfaction of such obligations.

Further, pursuant to an engagement letter entered into between us and the Placement Agent, dated May 26, 2026 (the “Engagement Letter”), the Placement Agent acted as the exclusive placement agent in connection with the foregoing transaction, and we issued to the Placement Agent’s designees the Placement Agent Warrants in substantially the same form as the Series C Warrants, except that the exercise price thereunder is \$1.0063 per share. We also reimbursed certain expenses of the Placement Agent in connection with the transaction. Additionally, we paid the Placement Agent an aggregate cash fee equal to 7.0% of the gross proceeds received in the Private Placement.

Implications of Being a Smaller Reporting Company and a Non-Accelerated Filer

We are a “smaller reporting company,” as defined in Rule 12b-2 of the Securities Exchange Act of 1934 (the “Exchange Act”), meaning that the market value of our common stock held by non-affiliates is less than \$700 million and our annual revenue was less than \$100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our shares held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year for which audited financial statements are available as of the determination date and the market value of our shares held by non-affiliates is less than \$700 million. As a smaller reporting company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation. If investors consider our common stock less attractive as a result of our election to use the scaled disclosure permitted for smaller reporting companies, then there may be a less active trading market for our common stock and our share price may be more volatile.

Additionally, as a non-accelerated filer, we may continue to take advantage of the exception from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended.

Company Information

We were incorporated in Delaware in April 2011. Our principal executive offices are located at 2000 Sierra Point Parkway, Suite 400, Brisbane, CA 94005, and our telephone number is (415) 798-8589. Our website is located at <http://www.tempesttx.com>. We do not incorporate by reference into this prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus.

The Tempest logo and other trademarks or service marks of Tempest Therapeutics, Inc. appearing in this prospectus are the property of Tempest Therapeutics, Inc. Other trademarks, service marks or trade names appearing in this prospectus are the property of their respective owners. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

The Offering

Common stock offered by the selling stockholders	Up to an aggregate 9,534,164 Shares, consisting of (i) up to 3,105,591 shares of our common stock issuable upon the exercise of the Pre-Funded Warrants, (ii) up to 3,105,591 shares of our common stock issuable upon the exercise of the Series C Warrants, (iii) up to 3,105,591 shares of our common stock issuable upon the exercise of the Series D Warrants, and (iv) up to 217,391 shares of our common stock issuable upon the exercise of the Placement Agent Warrants.
Common stock currently outstanding	16,889,767 shares of common stock as of September 21, 2026.
Common stock to be outstanding assuming exercise of the Warrants	26,423,931 shares of common stock.
The Warrants	The Pre-Funded Warrants are exercisable immediately, have an exercise price of \$0.001 per share and may be exercised at any time until exercised in full. The Series C Warrants will become exercisable on the Stockholder Approval Date and have a term of six years from the later of the Stockholder Approval Date and the Effectiveness Date. The Series D Warrants will become exercisable on the Stockholder Approval Date and have a term of three years from the later of the Stockholder Approval Date and the Effectiveness Date. The Common Warrants have an exercise price of \$0.805 per share. The Placement Agent Warrants have substantially the same terms as the Series C Warrants, except that the exercise price thereunder is \$1.0063 per share.
Selling stockholders	All of the Shares are being offered by the selling stockholders. See “Selling Stockholders” on page 8 of this prospectus for more information on the selling stockholders.
Use of Proceeds	We will not receive any of the proceeds from the selling stockholders’ sale or other disposition of the Shares offered pursuant to this prospectus. All net proceeds from the sale of the Shares covered by this prospectus will go to the selling stockholders. However, we will receive proceeds from the exercise of any Warrants for cash. See the section of this prospectus titled “Use of Proceeds” on page 7 of this prospectus.
Plan of Distribution	Each selling stockholder will determine when and how it will sell the common stock offered in this prospectus, as described in “Plan of Distribution.”
Risk Factors	Any investment in the Shares offered hereby is speculative and involves a high degree of risk. You should carefully consider the information set forth under “Risk Factors” on page 4 and elsewhere in this prospectus.
Nasdaq Capital Market symbol	Our common stock is listed on The Nasdaq Capital Market under the symbol “TPST”.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described in the sections entitled “Risk Factors” in our most recent Annual Report on Form 10-K and in our subsequent Quarterly Reports on Form 10-Q, as filed with the SEC, which are incorporated herein by reference in their entirety, as well as any amendments or updates to our risk factors reflected in subsequent filings with the SEC, including any applicable prospectus supplement. The risks so described are not the only risks facing our company. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition, results of operations or prospects could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned elsewhere in this prospectus. For more information, see the section entitled “Where You Can Find Additional Information.” Please also read carefully the section entitled “Special Note Regarding Forward-Looking Statements.”

The sale of a substantial number of shares of our common stock in the public market, including the resale of the Shares, could adversely affect the prevailing market price for our common stock.

We are registering for resale up to 9,534,164 shares of our common stock, consisting of the Shares issuable to the selling stockholders upon exercise of the Warrants. Sales of substantial amounts of shares of our common stock in the public market, or the perception that such sales might occur, could adversely affect the market price of our common stock. We cannot predict if and when the selling stockholders may sell the Shares in the public markets. Furthermore, in the future, we may issue additional shares of our common stock or other equity or debt securities exercisable for, or convertible into, shares of our common stock. Any such issuances could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any applicable prospectus supplement or free writing prospectus, including the documents that we incorporate by reference herein and therein, contain “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These statements relate to future events or to our future operating or financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “could,” “would,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “projects,” “predicts,” “potential” and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. In addition, statements indicating that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date they were made, and while we believe such information formed a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

These and other risks are described in greater detail under “Risk Factors” in this prospectus and in the “Risk Factors,” “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections incorporated by reference from our most recent Annual Report on Form 10-K and in our Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, as well as any amendments thereto reflected in subsequent filings with the SEC.

Also, forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

Forward-looking statements contained in this prospectus, including the documents that we incorporate by reference herein, include, but are not limited to, statements about:

- our ability to continue as a going concern absent access to sources of liquidity, as well as our history of recurring losses and negative cash flows from operating activities, significant future commitments and the uncertainty regarding the adequacy of our liquidity to pursue our complete business objectives;
- our ability to maintain compliance with the Nasdaq listing standards;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- the development, regulatory approval, efficacy and commercialization of competing products;
- the development plans, regulatory approvals, and timing for TPST-4003 and other product candidates;
- our ability to obtain stockholder approval for the issuance of the Shares upon exercise of the Warrants;
- the expected proceeds from cash exercises of Warrants, if any;
- our ability to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates;

- our ability to retain regulatory approval for our product candidates or future product candidates in the United States and in any foreign countries in which we may seek to do business;
- our ability to retain and hire our board of directors, senior management, or operational personnel;
- our ability to develop and maintain our corporate infrastructure, including our ability to design and maintain an effective system of internal controls;
- the general economic, political, and market conditions and overall fluctuations in the financial markets in the United States and abroad, including as a result of bank failures, public health crises or geopolitical tensions;
- our expectation regarding the period during which we will qualify as a smaller reporting company under the federal securities laws; and
- our expectations regarding our ability to obtain, maintain and enforce intellectual property protection for our products and technology, as well as our ability to operate our business without infringing, misappropriating or otherwise violating the intellectual property rights of others.

You should read this prospectus, any applicable prospectus supplement, together with the documents that we have filed with the SEC that are incorporated by reference, and any free writing prospectus we have authorized for use in connection with this offering, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We will not receive any of the proceeds from the selling stockholders' sale or other disposition of the Shares offered pursuant to this prospectus. All net proceeds from the sale of the Shares covered by this prospectus will go to the selling stockholders. However, we will receive proceeds from the exercise of any Warrants for cash.

If all of the Warrants were exercised for cash in full, the gross proceeds to the Company would be approximately \$5.22 million. We intend to use the net proceeds of such Warrant exercises, if any, for working capital and general corporate purposes. We can make no assurances that any of the Warrants will be exercised, or if exercised, that they will be exercised for cash, the quantity which will be exercised or in the period in which they will be exercised.

We will bear the out-of-pocket costs, expenses and fees incurred in connection with the registration of the Shares being offered for resale by the selling stockholders pursuant to this prospectus. Other than registration expenses, the selling stockholders will bear underwriting discounts, commissions, or other similar expenses payable with respect to sales of the Shares offered hereby.

SELLING STOCKHOLDERS

The Shares being offered by the selling stockholders are those shares of common stock issuable upon exercise of the Warrants issued pursuant to the Purchase Agreement and Engagement Letter in connection with the Private Placement. For additional information regarding the issuance of the Shares, see “Prospectus Summary—Private Placement.” We are registering the Shares in order to permit the selling stockholders (or their respective ‘s pledgees, donees, transferees, assignees and other successors-in-interest) to offer the Shares for resale from time to time. Other than with respect to the Placement Agent, which acted as our placement agent in the Private Placement, our June 2026 warrant inducement (the “June 2026 Warrant Inducement”), as more fully described in our Current Report on Form 8-K as filed with the SEC on June 2, 2026, and in our March 2026 private placement (the “March 2026 PIPE”), as more fully described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2025 as filed with the SEC on March 30, 2026, and except for the ownership of the Warrants issued to the selling stockholders in the Private Placement, and securities issued pursuant to prior financings, the selling stockholders have not had any material relationship with us within the past three years. No selling stockholder currently holds, nor has any selling stockholder held within the past three years, any position or office with us or any of our predecessors or affiliates.

The selling stockholders may sell some, all or none of their Shares. See “Plan of Distribution.” We do not know whether the selling stockholders will exercise any of their respective Warrants and acquire any Shares, nor if they do, how long the selling stockholders will hold the Shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholders regarding the sale or other disposition of any of the Shares. The Shares covered hereby may be offered from time to time by the selling stockholders. As a result, we cannot estimate the number of shares of common stock each of the selling stockholders will beneficially own after termination of sales under this prospectus. In addition, the selling stockholders may have sold, transferred or otherwise disposed of all or a portion of their Shares since the date on which they provided information for the table below.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our common stock. Generally, a person “beneficially owns” shares of our common stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock by each of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on such selling stockholder’s ownership of our common stock, including Shares underlying the Warrants, as of September 21, 2026, assuming the full exercise of the Warrants held by the selling stockholders without regard to any limitations on exercise of the Warrants contained therein. The third column lists the maximum number of the Shares of common stock being offered in this prospectus by the selling stockholders. The fourth and fifth columns list the number of shares of common stock owned after this offering, by number of the shares of common stock and percentage of outstanding shares of common stock, assuming the full exercise of the Warrants without regard to any limitations on exercise of the Warrants contained therein. The percentage of shares of our common stock owned prior to and after the offering under this prospectus is based on 16,889,767 shares of our common stock outstanding as of September 21, 2026.

A selling stockholder (together with its affiliates) of the Pre-Funded Warrants or Common Warrants may not exercise any portion of any Pre-Funded Warrant or Common Warrant, to the extent that such exercise would cause the aggregate number of shares of common stock beneficially owned by such selling stockholder (together with its affiliates) to exceed 9.99% with respect to the Pre-Funded Warrants or 4.99% (or, upon election of the selling stockholder, 9.99%) with respect to the Common Warrants of the number of shares of common stock outstanding immediately after giving effect to the exercise, subject to such selling stockholder’s rights under the Pre-Funded Warrants and the Common Warrants to increase or decrease such percentage to another percentage not in excess of 9.99% upon notice from such selling stockholder to our company (upon not less than 61 days’ prior notice in the case of an increase). As described above, the number of shares in the table below does not reflect this limitation.

Name of Selling Stockholder	Shares of Common Stock	Maximum Number of Shares Being Offered	Beneficial Ownership After this Offering ⁽¹⁾	
	Beneficially Owned prior to this Offering		Number of Shares	Percent of Outstanding Common Stock
Armistice Capital Master Fund Ltd. ⁽²⁾	10,242,699	9,316,773	925,926	4.99%
Augustus Trading LLC ⁽³⁾	192,028	139,402	52,626	*
Noam Rubinstein ⁽⁴⁾⁽⁵⁾	94,330	68,478	25,852	*
Wilson Drive Holdings LLC ⁽⁶⁾	10,107	7,337	2,770	*
Charles Worthman ⁽⁴⁾⁽⁷⁾	2,995	2,174	821	*

* Less than one percent.

- (1) Assumes that the selling stockholders exercise all Warrants and sell all Shares offered under this prospectus, but that such selling stockholders do not sell or otherwise dispose of any of the other shares of common stock that it beneficially owns as of the date hereof.
- (2) Consists of (i) 3,105,591 shares of common stock issuable upon the exercise of the Pre-Funded Warrants, (ii) 3,105,591 shares of common stock issuable upon the exercise of the Series C Warrants, (iii) 3,105,591 shares of common stock issuable upon the exercise of the Series D Warrants, (iv) 462,963 shares of common stock issuable upon the exercise of series A warrants to purchase shares of common stock issued to the selling stockholder in March 2026 at an exercise price of \$2.16 per share, and (v) 462,963 shares of common stock issuable upon the exercise of series B warrants to purchase shares of common stock issued to the selling stockholder in March 2026 at an exercise price of \$2.16 per share. The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Master Fund”), and may be deemed to be beneficially owned by: (i) Armistice Capital, LLC (“Armistice Capital”), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. The Pre-Funded Warrants are subject to a beneficial ownership limitation of 9.99%, and the Common Warrants, series A warrants and series B warrants are subject to a beneficial ownership limitation of 4.99% (or, upon election of the selling stockholder, 9.99%), which such limitation restricts the selling stockholder from exercising that portion of the Pre-Funded Warrants, Common Warrants, series A warrants or series B warrants, as applicable, that would result in the selling stockholder and its affiliates owning, after exercise, a number of shares of common stock in excess of the beneficial ownership limitation. The address of Armistice Capital Master Fund Ltd. is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.
- (3) The number of shares of common stock beneficially owned prior to this offering consist of (i) 52,626 shares of common stock issuable upon exercise of certain placement agent warrants issued to the selling stockholder in May 2026 at an exercise price of \$2.1625 per share, and (ii) 139,402 shares of common stock issuable upon exercise of the Placement Agent Warrants. Orsium Capital LLC, the authorized agent to Augustus Trading LLC, has discretionary authority to vote and dispose of the securities held by Augustus Trading LLC and may be deemed to be the beneficial owner of these securities (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended). Olivier Morali, in his capacity as managing member of Orsium Capital LLC, may also be deemed to have investment discretion and voting power over the shares held by Augustus Trading LLC. Orsium Capital LLC and Mr. Morali each disclaims any beneficial ownership of these securities. The business address of Augustus Trading LLC is 600 Lexington Avenue, 32nd Floor, New York, New York 10022.
- (4) Each of these selling stockholders is affiliated with H.C. Wainwright & Co., LLC, a registered broker-dealer with a business address of 430 Park Ave, 3rd Floor, New York, New York 10022. H.C. Wainwright & Co., LLC served as our exclusive placement agent in connection with the Private Placement, the March 2026 PIPE and the June 2026 Warrant Inducement, for which it received compensation. Each of the selling stockholders has the voting and dispositive power over the securities held, acquired the securities in the ordinary course of business and, at the time the securities were acquired, the selling stockholders had no agreement or understanding, directly or indirectly, with any person to distribute such securities.
- (5) Represents (i) 68,478 shares of common stock issuable upon exercise of the Placement Agent Warrants, which were issued in connection with the Private Placement, and (ii) 25,852 shares of common stock issuable upon exercise of certain placement agent warrants issued to the selling stockholder in May 2026 at an exercise price of \$2.1625 per share.
- (6) Represents (i) 2,770 shares of common stock issuable upon exercise of certain placement agent warrants issued to the selling stockholder in May 2026 at an exercise price of \$2.1625 per share, and (ii) 7,337 shares of common stock issuable upon exercise of the Placement Agent Warrants, which were issued in connection with the Private Placement, and are held by Wilson Drive Holdings LLC. Craig Schwabe is the managing member of Wilson Drive Holdings LLC and has the power to vote and dispose of the securities held. Neither Wilson Drive Holdings LLC nor Mr. Schwabe is a broker-dealer. Mr. Schwabe is affiliated with the following registered broker-dealers: H.C. Wainwright & Co., LLC, Rodman & Renshaw LLC and Stockblock Securities LLC. The business address of Wilson Drive Holdings LLC is 600 Lexington Avenue, 32nd Floor, New York, NY 10022. The securities were acquired in the ordinary course of business and, at the time the securities were acquired, the selling stockholder had no agreement or understanding, directly or indirectly, with any person to distribute such securities.
- (7) Represents (i) 2,174 shares of common stock issuable upon exercise of the Placement Agent Warrants, which were issued in connection with the Private Placement, and (ii) 821 shares of common stock issuable upon exercise of certain placement agent warrants issued to the selling stockholder in May 2026 at an exercise price of \$2.1625 per share.

PLAN OF DISTRIBUTION

The selling stockholders will act independently of us in making decisions with respect to the timing, manner and size of each and any sale of Shares. Each selling stockholder and any of such selling stockholder's pledgees, donees, transferees, assignees and other successors-in-interest may, from time to time, sell any or all of the Shares beneficially owned by them and offered hereby directly to investors, through one or more broker-dealers or agents, or through any other manner permitted by law, on a continuous or delayed basis. The selling stockholders will be responsible for commissions charged by any such broker-dealers or agents. The Shares may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. The offering price of the Shares from time to time will be determined by the selling stockholders and, at the time of the determination, may be higher or lower than the market price of our common stock on The Nasdaq Capital Market or any other exchange or market. Each selling stockholder may use any one or more of the following methods when selling the Shares covered by this registration statement:

- through brokers or dealers (who may act as agent or principal and who may receive compensation in the form of discounts, concessions or commissions from such selling stockholder, the purchaser or such other persons who may be effecting such sales, which discounts, concessions or commissions as to any particular broker or dealer may be in excess of those customary to the types of transactions involved) for resale to the public or to institutional investors at various times;
- through negotiated transactions, including, but not limited to, block trades in which the 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 purchases by a broker or dealer as principal and resale by that broker or dealer for its account;
- on any national securities exchange or quotation service on which the shares may be listed or quoted at the time of sale at market prices prevailing at the time of sale, at prices related to such prevailing market prices, or at negotiated prices;
- in privately negotiated transactions other than exchange or quotation service transactions;
- short sales, purchases or sales of put, call or other types of options, forward delivery contracts, swaps, offerings of structured equity-linked securities or other derivative transactions or securities;
- hedging transactions, including, but not limited to:
 - o transactions with a broker-dealer or its affiliate, whereby the broker-dealer or its affiliate will engage in short sales of shares and may use Shares held by such selling stockholder to close out its short position;
 - o options or other types of transactions that require the delivery of Shares to a broker-dealer or an affiliate thereof, who will then resell or transfer the Shares; or
 - o loans or pledges of Shares to a broker-dealer or an affiliate, who may sell the loaned Shares or, in an event of default in the case of a pledge, sell the pledged Shares;
- through offerings of securities exercisable, convertible or exchangeable for shares, including, without limitation, securities issued by trusts, investment companies or other entities;
- offerings directly to one or more purchasers, including institutional investors;
- through ordinary brokerage transactions and transactions in which a broker solicits purchasers;
- through distribution to the security holders of the selling stockholder;
- by pledge to secure debts and other obligations;
- through a combination of any such methods of sale; or
- through any other method permitted under applicable law.

There can be no assurance that the selling stockholders will sell any or all of the Shares registered pursuant to the registration statement of which this prospectus forms a part.

In addition, a selling stockholder may elect to make an in-kind distribution of securities to its members, partners or stockholders pursuant to the registration statement of which this prospectus forms a part by delivering a prospectus with a plan of distribution. Such members, partners or stockholders would thereby receive freely tradeable securities pursuant to the distribution through a registration statement. To the extent a distributee is an affiliate of ours (or to the extent otherwise required by law), we may file a supplement to this prospectus in order to permit the distributees to use the prospectus to resell the securities acquired in the distribution.

The selling stockholders also may transfer the securities in other circumstances, in which case the transferees, pledgees or other successors-in-interest will be the selling beneficial owners for purposes of this prospectus. Upon being notified by a selling stockholder that a donee, pledgee, transferee or other successor-in-interest intends to sell our securities, we will, to the extent required, promptly file a supplement to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending the list of selling stockholders to include the donee, pledgee, transferee or other successors-in-interest as a selling stockholder under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

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

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

We are required to pay certain fees and expenses incurred by us incident to the registration of the common stock covered hereby. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act. We shall not be responsible for any of the selling stockholders’ selling costs incurred pursuant to any available method provided hereunder for selling securities.

We are obligated to maintain the effectiveness of this registration statement until no holder of Pre-Funded Warrants or Common Warrants owns any Pre-Funded Warrants, Common Warrants or Shares issuable upon exercise thereof. The Shares offered hereby will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the Shares offered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the Shares offered hereby may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

Certain legal matters, including the validity of the shares of common stock offered by this prospectus, will be passed upon by Greenberg Traurig, LLP.

EXPERTS

The consolidated financial statements of Tempest Therapeutics, Inc. appearing in Tempest Therapeutics, Inc.'s Annual Report (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 (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), 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 ADDITIONAL INFORMATION

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>.

We maintain a website at www.tempesttx.com. Information contained in or accessible through our website does not constitute a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus. We incorporate by reference into this prospectus the information or documents listed below that we have filed with the SEC:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2025, filed with the SEC on March 30, 2026;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2026 and June 30, 2026, filed with the SEC on [May 14, 2026](#) and [August 13, 2026](#), respectively;
- our Current Reports on Form 8-K (not including any information furnished under Item 2.02, 7.01 or 9.01 of such Form 8-K or any other information that is identified as “furnished” rather than filed, which information is not incorporated by reference herein) filed with the SEC on [May 6, 2026](#), [May 22, 2026](#), [May 22, 2026](#), [May 29, 2026](#), [June 2, 2026](#), [June 4, 2026](#), [June 23, 2026](#), [July 22, 2026](#), [July 28, 2026](#), [August 13, 2026](#), [August 13, 2026](#), [August 18, 2026](#), [August 24, 2026](#), [September 15, 2026](#), [September 16, 2026](#) and [September 17, 2026](#); and
- the description of our common stock set forth in our registration statement on [Form 8-A](#) (File No. 001-35890), filed with the SEC on April 25, 2013, including any amendments thereto or reports filed for the purposes of updating this description, including [Exhibit 4.1](#) to our Annual Report on Form 10-K for the fiscal year ended December 31, 2025 filed with the SEC on March 30, 2026.

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

We also incorporate by reference into this prospectus all documents (excluding information furnished pursuant to Items 2.02, 7.01 and 9.01 of Form 8-K or any other information that is identified as or is deemed “furnished” rather than filed or is otherwise not incorporated into registration statements pursuant to applicable SEC rules) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial filing of the registration statement of which this prospectus forms a part and prior to the termination of this offering.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits that are specifically incorporated by reference into such documents. You should direct any requests for documents to Tempest Therapeutics, Inc., Attn: Investor Relations, 2000 Sierra Point Parkway, Suite 400, Brisbane, California 94005; telephone: (415) 798-8589.

Tempest Therapeutics, Inc.



Up to 9,534,164 Shares of Common Stock

PROSPECTUS

October 1, 2026
