

PROSPECTUS

2,777,781 Shares



Common Stock

This prospectus relates to the offer and resale from time to time of up to an aggregate 2,777,781 shares of our common stock, par value \$0.001 per share (the “Shares”) consisting of (i) 462,964 shares of our common stock, (ii) 925,927 shares of our common stock issuable upon the exercise of outstanding Series A Warrants (the “Series A Warrants”), (iii) 925,927 shares of our common stock issuable upon the exercise of outstanding Series B Warrants (the “Series B Warrants”), and (iv) 462,963 shares of our common stock issuable upon the exercise of pre-funded warrants (the “Pre-Funded Warrants,” and together with the Series A Warrants and the Series B Warrants, the “Warrants”) by the selling stockholders named herein, together with any additional selling stockholders listed in a prospectus supplement (together with any of such stockholders’ transferees, pledgees, donees or successors). The Shares were acquired by the selling stockholders named herein pursuant to a securities purchase agreement, dated March 20, 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 registering the offer and sale of the Shares from time to time by the selling stockholders to satisfy the registration rights granted in connection with the issuance of the Shares. We will not receive any proceeds from the sale of the Shares by the selling stockholders.

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” for more information about how the selling stockholders may sell or dispose of their Shares.

Our common stock is listed on The Nasdaq Capital Market under the trading symbol “TPST.” On April 8, 2026, the closing price of our common stock was \$1.56 per share.

Investing in our common stock involves a high degree of risk. Before making an investment decision, please 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 that is incorporated by reference herein.

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

The date of this prospectus is April 9, 2026.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (“SEC”), using a “shelf” registration process. Under this registration statement, the selling stockholders may sell from time to time in one or more offerings the common stock described in this prospectus.

We have not authorized anyone to provide you with information other than the information that we have provided 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 our “company” refer to Tempest Therapeutics, Inc. and its subsidiaries.

PROSPECTUS SUMMARY

This summary highlights certain information about us, the Private Placement (as defined below) and selected information contained elsewhere in or incorporated by reference into this prospectus. This summary is not complete and does not contain all of the information that you should consider before making an investment decision. For a more complete understanding of our company, you should read and consider carefully the more detailed information included or incorporated by reference in this prospectus and any applicable prospectus supplement, including the factors described under the heading “Risk Factors” on page 4 of this prospectus, as well as the information incorporated herein by reference, before making an investment decision.

Company Overview

We are a clinical-stage biotechnology company advancing a diversified portfolio of cell therapy and small molecule product candidates. In February 2026, we expanded our pipeline through a strategic transaction under which we acquired rights to a portfolio of dual-targeting chimeric antigen receptor T-cells (“CAR-T”) product candidates with the potential to treat certain blood cancers, solid tumors and immunology indications, including TPST-2003, an autologous CD19/B-cell maturation antigen CAR-T therapy currently in clinical development for relapsed or refractory multiple myeloma (“rrMM”). Our portfolio also includes two clinical-stage small molecule product candidates with the potential to treat certain cancer indications. One of our small-molecule product candidates, amezalpat (previously known as TPST-1120), has completed a Phase 2 study in first-line hepatocellular carcinoma (“HCC”). Amezalpat remains Phase 3-ready in HCC and we plan to pursue business development discussions to advance pivotal development. Our second small-molecule product candidate is TPST-1495, which we plan to initiate a Phase 2 study for in familial adenomatous polyposis. The study is expected to be funded by the National Cancer Institute and conducted through the Cancer Prevention Clinical Trials Network, enabling advancement with limited internal capital deployment.

Additional information about our company, including recent developments, is contained in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, including our Annual Report on Form 10-K that we filed with the SEC on March 30, 2026.

Private Placement

On March 20, 2026, we entered into the Purchase Agreement with (a) two institutional investors (the “Institutional Investors”) and (b) Factor Bioscience Inc. (“Factor” and, together with the Institutional Investors, each an “Investor” and, together, the “Investors”), pursuant to which we agreed to issue and sell in a private placement (the “Private Placement”) an aggregate of 462,964 shares of our common stock, and, in lieu of common stock, Pre-Funded Warrants to purchase up to 462,963 shares of our common stock, in each case accompanied by (i) Series A Warrants to purchase up to 925,927 shares of our common stock and (ii) Series B Warrants to purchase up to 925,927 shares of our common stock (the Series B Warrants together with the Series A Warrants, the “Common Warrants”). The shares of common stock and the Common Warrants were immediately separable and were issued separately.

Pursuant to the Purchase Agreement, we agreed to seek approval from our stockholders for the issuance of the shares issuable upon exercise of the Common Warrants within 90 days following the date of the Purchase Agreement (the “Stockholder Approval”). The Series A Warrants will become exercisable on the effective date of the Stockholder Approval (the “Stockholder Approval Date”) and have a term of five years from the later of the Stockholder Approval Date and the Effectiveness Date (as defined below). The Series B Warrants will become exercisable on the Stockholder Approval Date and have a term of twenty-four months from the later of the Stockholder Approval Date and the Effectiveness Date. The Common Warrants have an exercise price of \$2.16 per share. The Pre-Funded Warrants are 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.

In connection with the Private Placement, we entered into a registration rights agreement with the Investors (the “Registration Rights Agreement”), pursuant to which we agreed to file registration statements under the Securities Act of 1933, as amended (the “Securities Act”) with the SEC covering the resale of the shares of common stock issued in the Private Placement and the shares of our common stock underlying the Common Warrants and Pre-Funded Warrants no later than 15 calendar days following the date of the Purchase Agreement, and to use reasonable best efforts to have the registration statement declared effective by 45 calendar days following the date of the Purchase Agreement, and in any event no later than 75 calendar days following the date of the Purchase Agreement in the event of a “full review” by the SEC (the “Effectiveness Date”).

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 shares held by non-affiliates is less than \$700 million and our annual revenue was less than \$100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our shares held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year 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-back disclosure permitted for smaller reporting companies, 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 supplement the information on, or accessible through, our website, and you should not consider it as part of this prospectus supplement.

The Tempest logo and other trademarks or service marks of Tempest Therapeutics, Inc. appearing in this prospectus supplement are the property of Tempest Therapeutics, Inc. Other trademarks, service marks or trade names appearing in this prospectus supplement 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 of 2,777,781 Shares, including 462,963 shares of our common stock issuable upon the exercise of the Pre-Funded Warrants and 1,851,854 shares of our common stock issuable upon the exercise of the Common Warrants.
Terms of the offering	Each selling stockholder will determine when and how it will sell the common stock offered in this prospectus, as described in “Plan of Distribution.”
Use of Proceeds	We will not receive any proceeds from the sale of the shares of common stock covered by this prospectus.
Risk Factors	See “Risk Factors” on page 4 for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Nasdaq Capital Market symbol	TPST.

The selling stockholders named in this prospectus may offer and sell up to 2,777,781 shares of our common stock. Our common stock is currently listed on Nasdaq Capital Market under the symbol “TPST.” Shares of our common stock that may be offered under this prospectus are, or will be upon exercise of the Warrants, fully paid and non-assessable. We will not receive any of the proceeds from sales by the selling stockholders of any of the common stock covered by this prospectus. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholders for offer and resale, we are referring to the Shares. When we refer to the selling stockholders in this prospectus, we are referring to the selling stockholders identified in this prospectus and, as applicable, their respective permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

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 subsequent Quarterly Reports on Form 10-Q, as filed with the SEC, which are incorporated herein by reference in their entirety, as well any amendment or updates to our risk factors reflected in subsequent filings with the SEC, including any applicable prospectus supplement. 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.”

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, performances 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.

We discuss many of these risks 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, these 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. 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 the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale or other disposition of shares of our common stock held by the selling stockholders pursuant to this prospectus; however, we will receive proceeds from any cash exercise of the Common Warrants and nominal proceeds from any cash exercise of the Pre-Funded Warrants. We will bear the out-of-pocket costs, expenses and fees incurred in connection with the registration of shares of our common stock to be sold by the selling stockholders pursuant to this prospectus. Other than registration expenses, the selling stockholders will bear underwriting discounts, commissions, placement agent fees or other similar expenses payable with respect to sales of shares of our common stock.

SELLING STOCKHOLDERS

The selling stockholders may sell some, all or none of their Shares. We do not know 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 of common stock 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 information in the table below and the footnotes thereto regarding shares of common stock to be beneficially owned after the offering assumes the sale of all shares being offered by the selling stockholders under this prospectus, consisting of the Shares. This information has been obtained from the selling stockholders. The percentage of shares of common stock owned after the offering is based on 14,344,034 shares of common stock outstanding as of March 30, 2026.

As used in this prospectus, the term “selling stockholders” includes the selling stockholders listed in the table below, together with any additional selling stockholders listed in a prospectus supplement, and their donees, pledgees, assignees, transferees, distributees and successors-in-interest that receive Shares in any non-sale transfer after the date of this prospectus.

<u>Name of Selling Stockholder</u>	<u>Shares of Common Stock Beneficially Owned prior to this Offering</u>	<u>Number of Shares Being Offered⁽¹⁾</u>	<u>Beneficial Ownership After this Offering⁽²⁾</u>	
			<u>Number of Shares</u>	<u>Percent of Outstanding Common Stock</u>
Armistice Capital, LLC ⁽³⁾	1,388,889	1,388,889	—	—
Intracoastal Capital, LLC ⁽⁴⁾	694,446	694,446	—	—
Factor Bioscience Inc. ⁽⁵⁾	694,446	694,446	—	—

- (1) Represents all of the shares of our common stock that the selling stockholders may offer and sell from time to time under this prospectus without giving effect to the beneficial ownership limitation in the Pre-Funded Warrants or the Common Warrants.
- (2) Assumes that the selling stockholders sell all Shares registered under this prospectus, but that such selling stockholders don't sell or otherwise dispose of any of the other shares of common stock that it beneficially owns as of the date hereof.
- (3) Consists of (i) 462,963 shares of common stock issuable upon the exercise of Pre-Funded Warrants held by the selling stockholder, (ii) 462,963 shares of common stock issuable upon the exercise of Series A Warrants held by the selling stockholder and (iii) 462,963 shares of common stock issuable upon the exercise of Series B Warrants held by the selling stockholder. 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 Warrants are subject to a beneficial ownership limitation of 4.99%, which such limitation restricts the selling stockholder from exercising that portion of the Warrants that would result in the selling stockholder and its affiliates

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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.

- (4) Consists of (i) 231,482 shares of common stock held by the selling stockholder, (ii) 231,482 shares of common stock issuable upon the exercise of Series A Warrants held by the selling stockholder and (iii) 231,482 shares of common stock issuable upon the exercise of Series B Warrants held by the selling stockholder. Mitchell P. Kopin (“Mr. Kopin”) and Daniel B. Asher (“Mr. Asher”), each of whom are managers of Intracoastal, have shared voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities reported herein that are held by Intracoastal. The address of Intracoastal Capital is 245 Palm Trail, Delray Beach, FL 33483.
- (5) Consists of (i) 231,482 shares of common stock held by the selling stockholder, (ii) 231,482 shares of common stock issuable upon the exercise of Series A Warrants held by the selling stockholder and (iii) 231,482 shares of common stock issuable upon the exercise of Series B Warrants held by the selling stockholder. The address of Factor is 1035 Cambridge St., Suite 17B, Cambridge, MA 02141.

Relationship with Selling Stockholders

As discussed in greater detail above under the section “Prospectus Summary—Private Placement,” on March 20, 2026, we entered into the Purchase Agreement with (a) the Institutional Investors and (b) Factor, pursuant to which we agreed to issue and sell in the Private Placement an aggregate of 462,964 shares of our common stock, and, in lieu of common stock, Pre-Funded Warrants to purchase up to 462,963 shares of our common stock, in each case accompanied by (i) Series A Warrants to purchase shares of our common stock and (ii) Series B Warrants to purchase shares of our common stock. Dr. Matthew Angel, who is our Chief Executive Officer and a director, is a majority equityholder of the parent of Factor and Chairman of the Board of Directors of Factor. Pursuant to the Purchase Agreement, we sold an aggregate of 231,482 shares of our common stock, 231,482 Series A Warrants and 231,482 Series B Warrants to Factor in exchange for \$500,001.12, before deducting placement agent fees and other offering expenses payable by us. No other selling stockholder or any persons having control over such selling stockholder has held any position or office with us or our affiliates within the last three years or has had a material relationship with us or any of our predecessors or affiliates within the past three years, other than as a result of the ownership of our shares.

PLAN OF DISTRIBUTION

The selling stockholders may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- distributions to members, partners, stockholders or other equityholders of the selling stockholders;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales and settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

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

In connection with the sale of our common stock or interests therein, 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 common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock 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 the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling

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stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. However, we will receive proceeds from any cash exercise of the Common Warrants and nominal proceeds from any cash exercise of the Pre-Funded Warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule, or another available exemption from the registration requirements under the Securities Act.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act (it being understood that the selling stockholders shall not be deemed to be underwriters solely as a result of their participation in this offering). Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed with the selling stockholders to use our best efforts to cause the registration statement of which this prospectus constitutes a part to become effective and to remain continuously effective until such time as the selling stockholders no longer owns any Shares.

LEGAL MATTERS

Certain legal matters, including the validity of the shares of common stock offered by this prospectus, will be passed upon by Cooley 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 (File No. 001-35890):

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2025, filed with the SEC on March 30, 2026;
- our Current Reports on Form 8-K, filed with the SEC on [January 9, 2026](#), [January 28, 2026](#), [February 6, 2026](#), [February 25, 2026](#) and [March 23, 2026](#), to the extent the information in such reports is filed and not furnished; 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 (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items, and other information that is furnished or is otherwise not incorporated into registrations 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 this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

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.