UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2025

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number: 001-39527

PRELUDE THERAPEUTICS INCORPORATED

(Exact Name of Registrant as Specified in its Charter)

Delaware	**81-1384762**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
175 Innovation Boulevard Wilmington, Delaware	**19805**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (302) 467-1280

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	PRLD	Nasdaq Global Select Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of April 30, 2025, the registrant had 56,460,481 shares of voting and non-voting common stock, $0.0001 par value per share, outstanding.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

PRELUDE THERAPEUTICS INCORPORATED

BALANCE SHEETS

(in thousands, except share data)	March 31, 2025	December 31, 2024
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	$ 40,269	$ 12,474
Marketable securities	58,805	121,140
Prepaid expenses and other current assets	3,329	2,281
Total current assets	102,403	135,895
Restricted cash	4,044	4,044
Property and equipment, net	6,388	6,767
Operating lease right-of-use asset	28,315	28,699
Other assets	110	110
Total assets	$ 141,260	$ 175,515
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 5,831	$ 7,732
Accrued expenses and other current liabilities	11,303	15,209
Operating lease liability	2,600	2,492
Finance lease liability	53	208
Total current liabilities	19,787	25,641
Other liabilities	3,028	3,090
Operating lease liability	15,267	15,325
Total liabilities	38,082	44,056
Commitments (Note 8)		
Stockholders' equity:		
Voting common stock, $0.0001 par value: 487,149,741 shares authorized; 43,604,202 and 42,298,859 shares issued and outstanding at March 31, 2025 and December 31, 2024, respectively	4	4
Non-voting common stock, $0.0001 par value: 12,850,259 shares authorized; 12,850,259 shares issued and outstanding at both March 31, 2025 and December 31, 2024	1	1
Additional paid-in capital	718,809	714,982
Accumulated other comprehensive income	12	35
Accumulated deficit	(615,648)	(583,563)
Total stockholders' equity	103,178	131,459
Total liabilities and stockholders' equity	$ 141,260	$ 175,515

See accompanying notes to unaudited interim financial statements.

PRELUDE THERAPEUTICS INCORPORATED

STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(UNAUDITED)

(in thousands, except share and per share data)	Three Months Ended March 31, 2025	2024
Operating expenses		
Research and development	$ 28,816	$ 27,409
General and administrative	5,790	6,934
Total operating expenses	34,606	34,343
Loss from operations	(34,606)	(34,343)
Other income, net	2,521	2,912
Net loss	$ (32,085)	$ (31,431)
Per share information:		
Net loss per share of common stock, basic and diluted	$ (0.42)	$ (0.42)
Weighted average common shares outstanding, basic and diluted	75,986,281	75,735,954
Comprehensive loss:		
Net loss	$ (32,085)	$ (31,431)
Unrealized loss on marketable securities, net of tax	(23)	(458)
Comprehensive loss	$ (32,108)	$ (31,889)

See accompanying notes to unaudited interim financial statements.

PRELUDE THERAPEUTICS INCORPORATED

STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(UNAUDITED)

(in thousands, except shares)	Voting common stock		Non-voting common stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total
	Shares	Amount	Shares	Amount				
Balance at January 1, 2025	42,298,859	$ 4	12,850,259	$ 1	$ 714,982	$ 35	$ (583,563)	$ 131,459
Issuance of common stock upon vesting of RSUs, net of 3,859 shares withheld for employee taxes	5,516	—	—	—	(5)	—	—	(5)
Issuance of common stock upon exercise of prefunded warrants	1,299,827	—	—	—	—	—	—	—
Unrealized loss on marketable securities, net of tax	—	—	—	—	—	(23)	—	(23)
Stock-based compensation expense	—	—	—	—	3,832	—	—	3,832
Net loss	—	—	—	—	—	—	(32,085)	(32,085)
Balance at March 31, 2025	43,604,202	$ 4	12,850,259	$ 1	$ 718,809	$ 12	$ (615,648)	$ 103,178

See accompanying notes to unaudited interim financial statements.

PRELUDE THERAPEUTICS INCORPORATED

STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (CONTINUED)
(UNAUDITED)

(in thousands, except shares)	Voting common stock		Non-voting common stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total
	Shares	Amount	Shares	Amount				
Balance at January 1, 2024	42,063,995	$ 4	12,850,259	$ 1	$ 693,252	$ 223	$ (456,390)	$ 237,090
Issuance of common stock upon exercise of stock options & vesting of RSUs, net of 4,285 shares withheld for employee taxes	7,510	—	—	—	(14)	—	—	(14)
Unrealized loss on marketable securities, net of tax	—	—	—	—	—	(458)	—	(458)
Stock-based compensation expense	—	—	—	—	5,547	—	—	5,547
Net loss	—	—	—	—	—	—	(31,431)	(31,431)
Balance at March 31, 2024	42,071,505	$ 4	12,850,259	$ 1	$ 698,785	$ (235)	$ (487,821)	$ 210,734

See accompanying notes to unaudited interim financial statements.

PRELUDE THERAPEUTICS INCORPORATED

STATEMENTS OF CASH FLOWS
(UNAUDITED)

(in thousands)	Three months ended March 31, 2025	2024
Cash flows used in operating activities:		
Net loss	$ (32,085)	$ (31,431)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	435	426
Noncash lease expense	384	414
Stock-based compensation	3,832	5,547
Amortization of premium and discount on marketable securities, net	79	(1,541)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(1,048)	(788)
Accounts payable	(1,910)	631
Accrued expenses and other liabilities	(3,968)	(5,692)
Operating lease liabilities	50	643
Net cash used in operating activities	(34,231)	(31,791)
Cash flows provided by investing activities:		
Purchases of marketable securities	(9,463)	(5,490)
Proceeds from maturities of marketable securities	71,696	37,000
Purchases of property and equipment	(47)	(289)
Net cash provided by investing activities	62,186	31,221
Cash flows used in financing activities:		
Proceeds from the issuance of common stock in connection with the exercise of stock options	—	2
Payment of withholding taxes related to stock-based compensation to employees	(5)	(16)
Principal payments on finance lease liabilities	(155)	—
Net cash used in financing activities	(160)	(14)
Net increase (decrease) in cash, cash equivalents and restricted cash	27,795	(584)
Cash, cash equivalents, and restricted cash at beginning of period	16,518	29,335
Cash, cash equivalents, and restricted cash at end of period	$ 44,313	$ 28,751
Supplemental disclosures of non-cash activities:		
Property and equipment in accounts payable and accrued expenses and other current liabilities	$ 19	$ 269
Unrealized loss on marketable securities	$ (23)	$ (458)

See accompanying notes to unaudited interim financial statements.

PRELUDE THERAPEUTICS INCORPORATED

NOTES TO UNAUDITED INTERIM FINANCIAL STATEMENTS

1. Background

Prelude Therapeutics Incorporated (the "Company") is a clinical-stage precision oncology company built on a foundation of drug discovery excellence to deliver novel precision cancer medicines to underserved patients. Since beginning operations in 2016, the Company has devoted substantially all its efforts to research and development, conducting preclinical and clinical studies, recruiting management and technical staff, administration, and raising capital.

2. Risks and liquidity

The Company faces a number of risks common to early-stage companies in the biotechnology industry. Principal among these risks are the uncertainties in the development process, development of the same or similar technological innovations by competitors, protection of proprietary technology, dependence on key personnel, compliance with government regulations and approval requirements, and the need to obtain additional financing to fund operations. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval, prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure, and extensive compliance-reporting capabilities. There can be no assurance that the Company's research and development will be successfully completed, adequate protection for the Company's technology will be obtained, any products developed will obtain necessary government regulatory approval, or any approved products will be commercially viable. The Company operates in an environment of rapid change in technology and substantial competition from pharmaceutical and biotechnology companies.

The Company follows the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 205-40, Presentation of Financial Statements—Going Concern, which requires management to assess the Company's ability to continue as a going concern within one year after the date the financial statements are issued. Since its inception, the Company has incurred operating losses and had an accumulated deficit of $615.6 million as of March 31, 2025. The Company has no product revenue to date and devotes its efforts to research and development. The Company anticipates incurring additional losses until such time, if ever, that it can generate significant sales of its product candidates currently in development.

At March 31, 2025, the Company had cash, cash equivalents, restricted cash and marketable securities totaling $103.1 million. Absent additional funding, the Company believes that its cash, cash equivalents, restricted cash and marketable securities will not be sufficient to fund its operating expenses and capital expenditure requirements for at least the next twelve months from the filing date of this Quarterly Report on Form 10-Q. As a result, substantial doubt exists about our ability to continue as a going concern. The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The financial statements do not include any adjustments related to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

To fund its operating expenses and capital expenditure requirements, the Company plans to seek additional funding through public or private equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. The Company may not be able to obtain financing on acceptable terms, or at all, and the Company may not be able to enter into strategic alliances or other arrangements on favorable terms, or at all. The terms of any financing may adversely affect the holdings or the rights of the Company's stockholders. If the Company is unable to obtain funding, it could be required to delay, reduce or eliminate research and development programs, product portfolio expansion or future commercialization efforts, which could adversely affect its business prospects.

3. Summary of significant accounting policies

The complete summary of significant accounting policies included in the Company's financial statements for the year ended December 31, 2024 can be found in "Note 3. Summary of significant accounting policies" of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (the "SEC") on March 10, 2025.

Basis of presentation

The accompanying unaudited interim financial statements have been prepared in accordance with generally accepted accounting principles ("GAAP") for interim financial information, the instructions to Form 10-Q and Article 10 of Regulation S-X. They do not include all of the information and notes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three months ended March 31, 2025 are not necessarily indicative of the results that may be expected for the year ending December 31, 2025. The accompanying unaudited interim financial statements should be read in conjunction with the annual audited financial statements and related notes as of and for the year ended December 31, 2024 found in the Company's Annual Report on Form 10-K filed with the SEC on March 10, 2025. Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

Use of estimates

The preparation of the unaudited interim financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and contingent liabilities at the date of the unaudited interim financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Estimates and assumptions are periodically reviewed, and the effects of the revisions are reflected in the accompanying unaudited interim financial statements in the period they are determined to be necessary. The most significant estimate relates to accrued clinical trial expenses.

Income taxes

Based upon the historical and anticipated future losses, management has determined that the deferred tax assets generated by net operating losses and research and development credits do not meet the more likely than not threshold for realizability. Accordingly, a full valuation allowance has been recorded against the Company's net deferred tax assets as of March 31, 2025 and December 31, 2024.

Segment Information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker ("CODM") is its Chief Executive Officer. The Company views and manages its operations as a single operating segment.

Cash, Cash Equivalents and Restricted cash

The Company's cash equivalents include short-term highly liquid investments with an original maturity of 90 days or less when purchased and are carried at fair value in the accompanying balance sheets.

Restricted cash consists of a letter of credit for the benefit of the landlord in connection with the Company's Chestnut Run Lease. See Note 8 for further details.

The following table provides a reconciliation of cash and cash equivalents and restricted cash reported within the balance sheet that total to the amounts shown in the statement of cash flows:

(in thousands)	March 31, 2025	December 31, 2024
Cash and cash equivalents	$ 40,269	$ 12,474
Restricted cash	4,044	4,044
Total cash, cash equivalents, and restricted cash shown in statement of cash flows	$ 44,313	$ 16,518

Marketable Securities

The Company's marketable securities consist of investments in corporate debt securities and United States ("U.S.") government debt securities that are classified as available-for-sale. The securities are carried at fair value with the unrealized gains and losses, net of tax, included in accumulated other comprehensive loss, a component of stockholders' equity. Realized gains and losses as well as credit losses, if any, on marketable securities are included in the Company's statements of operations. The Company classifies marketable securities that are available for use in current operations as current assets on the balance sheets.

Revenue Recognition

The Company recognizes revenue under Accounting Standard Codification 606 – *Revenue from Contracts with Customers*. Under ASC 606, the Company recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. The Company's revenue recognition analysis consists of the following steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations; and (v) recognition of revenue as we satisfy each performance obligation.

The Company evaluates all promised goods and services within a customer contract and determines which goods and services are separate performance obligations. This evaluation includes an assessment of whether the good or service is capable of being distinct and whether the good or service is separable from other promises in the contract.

The transaction price is determined based on the amount of consideration to which the Company expects to be entitled in exchange for transferring promised goods or services to a customer. The Company recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligations when (or as) the performance obligations are satisfied. The Company recognizes a liability when the Company has received payment but has not yet satisfied the related performance obligations.

Net Loss Per Share

Basic net loss per share of common stock is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during each period, including pre-funded warrants to purchase shares of common stock. Diluted net loss per share of common stock includes the effect, if any, from the potential exercise of securities, such as stock options, and the effect from unvested restricted stock units which would result in the issuance of incremental shares of common stock. For diluted net loss per share, the weighted-average number of shares of common stock is the same for basic net loss per share due to the fact that when a net loss exists, dilutive securities are not included in the calculation as the impact is anti-dilutive.

The following potentially dilutive securities have been excluded from the computation of diluted weighted-average shares of common stock outstanding, as they would be anti-dilutive:

	March 31,	
	2025	2024
Unvested restricted stock units	384,875	93,125
Stock options	16,639,068	14,737,740
Employee stock purchase plan	249,570	50,941
	17,273,513	14,881,806

Amounts in the above table reflect the common stock equivalents.

Recently Issued Accounting Pronouncements

Emerging Growth Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act, until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. We will remain an emerging growth company until the earlier to occur of (a) the last day of the fiscal year (i) following the fifth anniversary of the completion of our initial public offering (i.e. December 31, 2025), (ii) in which we have total annual gross revenues of at least $1.235 billion or (iii) in which we are deemed to be a "large accelerated filer" under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, or (b) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period. As a result, these unaudited interim financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

Accounting guidance not yet adopted

In December 2023, the FASB issued ASU 2023-09, Income Taxes - Improvements to Income Tax Disclosures. ASU 2023-09 requires enhanced income tax disclosures related to the rate reconciliation and income taxes paid information. For public business entities, the amendments in this ASU are effective for annual periods beginning after December 15, 2024 with early adoption permitted. The Company is currently evaluating the impact of this standard but does not expect that it will have a material impact on the financial statements and related disclosures.

4. Marketable Securities

The following provides detail of the Company's marketable securities.

(in thousands)	Amortized Cost	Gross unrealized gain	Gross unrealized loss	Fair Value
March 31, 2025				
Marketable securities:				
Corporate debt securities	$ 35,832	$ 21	$ (9)	$ 35,844
U.S. government securities	22,961	1	(1)	22,961
Total marketable securities	$ 58,793	$ 22	$ (10)	$ 58,805
December 31, 2024				
Marketable securities:				
Corporate debt securities	$ 70,059	$ 44	$ (27)	$ 70,076
U.S. government securities	51,046	18	—	51,064
Total marketable securities	$ 121,105	$ 62	$ (27)	$ 121,140

The Company's marketable securities generally have contractual maturity dates of 10 months or less. As of March 31, 2025, the Company had 17 securities with a total fair market value of $31.2 million in an unrealized loss position. The Company believes any unrealized losses associated with the decline in value of its securities is temporary and is primarily related to market factors. Furthermore, the Company believes it is more likely than not that it will be able to hold its marketable securities to maturity. Therefore, the Company anticipates a full recovery of the amortized cost basis of its marketable securities at maturity and an allowance for credit losses was not recognized.

5. Fair Value of Financial Instruments

Fair value is the price that could be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. Fair value determination in accordance with applicable accounting guidance requires that a number of significant judgments be made. Additionally, fair value is used on a nonrecurring basis to evaluate assets for impairment or as required for disclosure purposes by applicable accounting guidance on disclosures about fair value of financial instruments. Depending on the nature of the assets and liabilities, various valuation techniques and assumptions are used when estimating fair value. The Company

follows the provisions of ASC 820, Fair Value Measurement, for financial assets and liabilities measured on a recurring basis. The guidance requires fair value measurements be classified and disclosed in one of the following three categories:

- *Level 1:* Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- *Level 2:* Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liabilities.
- *Level 3:* Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

The following fair value hierarchy table presents information about the Company's assets and liabilities measured at fair value on a recurring basis:

	Fair value measurement at reporting date using		
(in thousands)	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
March 31, 2025			
Assets			
Cash equivalents			
Money Market Funds	$ 37,302	$ —	$ —
U.S. government securities	—	1,986	—
Total cash equivalents	37,302	1,986	—
Marketable securities:			
Corporate debt securities	$ —	$ 35,844	$ —
U.S. government securities	—	22,961	—
Total marketable securities	—	58,805	—
Total financial assets	$ 37,302	$ 60,791	$ —
December 31, 2024			
Assets			
Cash equivalents (Money Market Funds)	$ 11,246	$ —	$ —
Marketable securities:			
Corporate debt securities	—	70,076	—
U.S. government securities	—	51,064	—
Total marketable securities	—	121,140	—
Total financial assets	$ 11,246	$ 121,140	$ —

6. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

(in thousands)	March 31, 2025	December 31, 2024
Compensation and related benefits	$ 3,857	$ 9,022
Research and development	6,750	5,416
Other	696	771
	$ 11,303	$ 15,209

7. Common Stock

The Company has two classes of common stock: “voting common stock” and “non-voting common stock.” The holders of the voting common stock are entitled to one vote for each share of voting common stock held at all meetings of stockholders. Except as otherwise required by law, the holders of non-voting common stock shall not be entitled to vote at any meetings of stockholders (or written actions in lieu of meetings) and the shares of non-voting common stock shall not be included in determining the number of shares voting or entitled to vote on any matter. Unless required by law, there shall be no cumulative voting. Any holder of non-voting common stock may elect to convert each share of non-voting common stock into one fully paid and non-assessable share of voting common stock at any time by providing written notice to the Company; provided that as a result of such conversion, such holder, together with its affiliates and any members of a Schedule 13(d) group with such holder, would not beneficially own in excess of 9.99% of the Company’s common stock immediately prior to and following such conversion, unless otherwise as expressly provided for in the Company’s restated certificate of incorporation. However, this ownership limitation may be increased (not to exceed 19.99%) or decreased to any other percentage designated by such holder of non-voting common stock upon 61 days’ notice to the Company.

Shelf Registration Statements

In May 2024, the Company filed a shelf registration statement (the "2024 Shelf Registration Statement") with the SEC for the issuance of common stock, preferred stock, debt securities, warrants, subscription rights and units up to an aggregate amount of $400 million. The 2024 Shelf Registration statement was declared effective on June 10, 2024. The 2024 Shelf Registration statement expires in May 2027, and as of March 31, 2025, there was $400.0 million remaining under the 2024 Shelf Registration statement.

Open Market Sales Agreement

In March 2023, in connection with filing a prospectus supplement to the shelf registration statement filed in November 2021 (the “2021 Shelf Registration Statement"), the Company entered into an Open Market Sales Agreement (the "Sales Agreement") with Jefferies LLC, as the sales agent, pursuant to which the Company may offer and sell shares of its common stock having an aggregate offering amount of up to $75.0 million. In November 2024, the 2021 Shelf Registration Statement expired with respect to the shares to be sold under the Sales Agreement. Accordingly, the Company will need to register the $75.0 million of common stock that may be issued and sold pursuant to the Sales Agreement on a subsequent registration statement before any future sales are permitted. The Company will pay Jefferies LLC a commission rate of up to 3.0% of the aggregate gross proceeds from the sale of any shares of common stock pursuant to the Sales Agreement. At March 31, 2025, there was $75.0 million remaining under the Sales Agreement.

Pre-funded warrants

During the second quarter of 2023, the Company sold pre-funded warrants to purchase 12,895,256 shares of voting common stock at a price of $5.7499 per pre-funded warrant and during the fourth quarter of 2023 the Company sold pre-funded warrants to purchase 7,936,759 shares of voting common stock at a price of $3.1499 per pre-funded warrant.

The purchase price per share of each pre-funded warrant represented the per share offering price for the common stock, minus the $0.0001 per share exercise price of such pre-funded warrant.

The pre-funded warrants were classified as a component of permanent stockholders’ equity within additional paid-in capital and were recorded at the issuance date using a relative fair value allocation method. The pre-funded warrants are equity classified because they (i) are freestanding financial instruments that are legally detachable and separately exercisable from the equity instruments, (ii) are immediately exercisable, (iii) do not embody an obligation for the Company to repurchase its shares, (iv) permit the holders to receive a fixed number of shares of common stock upon exercise, (v) are indexed to the Company’s common stock and (vi) meet the equity classification criteria. In addition, such pre-funded warrants do not provide any guarantee of value or return.

There were 1,300,000 pre-funded warrants exercised during the three months ended March 31, 2025. The Company did not conduct any financings during the three months ended March 31, 2025 and 2024.

8. Commitments

Leases

The Company leases office and laboratory space in Wilmington, Delaware under a noncancelable lease (the “Chestnut Run Lease”). The premises include approximately 81,000 rentable square feet and has an initial term of 162 months with 3 five-year extension options and certain expansion rights. Neither the option to extend nor the expansion rights were recognized as part of the Company's measurement of the right-of-use ("ROU") asset and operating lease liability as of March 31, 2025. Under the terms of the Chestnut Run Lease, the landlord provided an allowance towards the cost of completing tenant improvements for the premises. The Company concluded that the improvements resulting from both the landlord's build-out and the tenant improvements are the landlord's

assets for accounting purposes. Costs incurred by the Company related to tenant improvements in excess of the landlord's allowance were treated as prepaid rent and increased the right-of-use asset on the commencement date.

In April 2024, the Company entered into a 12 month finance lease for equipment.

Our operating lease costs for each of the three months ended March 31, 2025 and 2024 were $1.1 million. Supplemental balance sheet and other information related to our operating and finance leases as of March 31, 2025 and December 31, 2024 were as follows:

(in thousands)

Leases	Classification	March 31, 2025	December 31, 2024
Assets			
Operating	Operating lease right-of-use assets	$ 28,315	$ 28,699
Finance	Property and equipment, net	492	523
Total leased assets		$ 28,807	$ 29,222
Liabilities			
Current:			
Operating	Current liabilities, operating lease liability	$ 2,600	$ 2,492
Finance	Current liabilities, finance lease liability	53	208
Non-Current:			
Operating	Operating lease liability	15,267	15,325
Total lease liabilities		$ 17,920	$ 18,025
Weighted-average discount rate			
Operating lease		15.0%	15.0%
Finance lease		10.5%	10.5%
Weighted-average remaining lease term (years)			
Operating lease		12.2	12.4
Finance lease		0.1	0.3

Supplemental cash flow information related to our leases for the three months ended March 31, 2025 and 2024 were as follows:

(in thousands)	Three months ended March 31, 2025	2024
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating lease	$ 620	$ —
Operating cash flows from finance lease	4	—
Financing cash flows from finance lease	155	—
Non-cash transaction		
Right-of-use asset obtained in exchange for lease obligations:		
Operating lease	—	109

Future minimum annual lease payments for operating and finance lease at March 31, 2025 are as follows:

(in thousands)	Operating lease	Finance lease
2025 (remaining)	$ 2,088	$ 53
2026	2,973	-
2027	3,047	-
2028	3,124	-
2029	3,202	-
2030	3,282	-
Thereafter	23,094	-
Total undiscounted lease payments	40,810	53
Less imputed interest	(22,943)	—
Lease liability	$ 17,867	$ 53

The Company paid a security deposit for the Chestnut Run Lease in the form of a letter of credit of $4.0 million, which is included in the accompanying balance sheet as restricted cash as of March 31, 2025. The security deposit may be reduced to $0.5 million over time in accordance with the terms of the Chestnut Run Lease. The Company expects the letter of credit to be reduced to $3.2 million in 2025.

Employment Agreements

The Company has employment agreements with key personnel providing for compensation and severance in certain circumstances, as defined in the respective employment agreements.

401(k) Defined Contribution Plan

The Company sponsors a 401(k) defined-contribution plan covering all employees. Participants are permitted to contribute up to 100% of their eligible annual pretax compensation up to an established federal limit on aggregate participant contributions. The Company provides a match of a maximum amount of 3% of the participant’s compensation. For each of the three months ended March 31, 2025 and 2024, the Company made matching contributions of $0.2 million.

Research Collaboration Agreement

In 2023, the Company entered into a multi-year, multi-program agreement with AbCellera Biologics Incorporated ("AbCellera") to jointly discover, develop, and commercialize novel oncology medicines for up to five programs. Under the terms of the agreement, AbCellera will lead manufacturing activities and the Company will lead clinical development and global commercialization, subject to AbCellera’s option to co-promote any resulting commercial products in the United States. If, at any point one party in the collaboration opts-out of future co-development cost sharing, that party will be entitled to a royalty from commercialization of the collaboration target, dependent on the proportion of their co-development contributions compared to the total development costs of a target as defined within the agreement. The Company concluded that the agreement with AbCellera will be accounted for under the scope of ASC 808, Collaborative Arrangements, as both parties will actively participate in joint operating activities and are exposed to significant risks and rewards. Under ASC 808, certain transactions between collaborative arrangement participants should follow the accounting for revenue under ASC 606, Revenue from Contracts with Customers, when the collaborative arrangement participant is a customer for a distinct good or service. The Company determined that co-development arrangement as defined in our agreement with AbCellera does not meet the definition of a customer as defined by ASC 606. As a result, these activities will be accounted for as research and development costs. Costs related to the AbCellera collaboration were not material for the three months ended March 31, 2025 and 2024.

License Agreement

In May 2024, the Company and Pathos AI, Inc. ("Pathos") entered into a license agreement under which the Company granted to Pathos an exclusive, sublicensable, world-wide license to its selective, brain-penetrant PRMT5 inhibitor, PRT811. Under the terms of the license agreement, the Company received a $3.0 million upfront, non-refundable payment. The agreement also included a near term $4.0 million payment upon the earlier of 180 days following the effective date of the license agreement or the execution of a quality agreement between the parties pursuant to which the Company transferred title to certain quantities of Active Pharmaceutical

Ingredient (“API”). In addition, the Company may receive potential developmental milestone payments up to $37.0 million, potential sales milestone payments up to $100 million and a range of high single-digit to low double-digit royalties on PRT811 global net sales.

The Company assessed the license agreement with Pathos in accordance with ASC 606, *Revenue from Contracts with Customer,* and concluded that Pathos is a customer. The license agreement with Pathos including the transfer of the following goods or services: (i) exclusive license to PRT811, (ii) transfer of licensed know-how and materials (i.e. datasets, regulatory and manufacturing documents, etc.), (iii) participation in a Joint Communication Committee ("JCC"), and (iv) execution of a quality agreement pursuant to which the Company transferred title to certain API. The Company evaluated all of the promised goods or services within the contract and determined which goods and services were separate performance obligations. The Company determined that Pathos could not benefit from the license separately from the related know-how and materials, accordingly they represent one combined performance obligation. The execution of a quality agreement pursuant to which the Company transferred title to certain API was identified as a separate performance obligation. The Company also determined the participation in the JCC is immaterial in the context of the license agreement as the Company has no decision-making ability through its participation in the JCC.

The Company satisfied both performance obligations in the second half of 2024. There was no revenue recognized in the statement of operations for the three months ended March 31, 2025 and 2024.

Other Research and Development Arrangements

The Company enters into agreements with clinical research organizations ("CROs") to assist in the performance of research and development activities. Expenditures to CROs represent a significant cost in clinical development for the Company.

9. Segments

The Company currently operates as one operating business segment focused on developing innovative medicines in areas of high unmet need for cancer patients. The Company's determination that it operates as a single segment is consistent with the financial information regularly reviewed by the CODM for purposes of evaluating performance, allocating resources, and planning and forecasting for future periods.

The accounting policies of the segment are the same as those described in the summary of significant accounting policies. The CODM assesses performance for the segment based on net loss, which is reported on the statement of operations and comprehensive loss as net loss. The measure of segment assets is reported on the balance sheet as total assets.

To date, the Company has not recognized any revenue from product sales, and the Company does not expect to generate any revenue in the foreseeable future. Net loss is used to monitor budget versus actual results. Monitoring budgeted versus actual results is used in assessing performance of the segment and to make decisions about the allocation of resources, along with cash forecast models.

The following tables summarizes the significant expense categories regularly reviewed by the CODM for the three months ended March 31, 2025 and 2024:

	Three months ended March 31,	
(in thousands)	**2025**	**2024**
Operating expenses:		
Research and development		
PRT3789	$ 4,493	$ 4,161
PRT7732	2,979	—
Discovery programs	2,468	5,190
Other	2,429	2,865
General costs, including personnel related	16,447	15,193
Total research and development	28,816	27,409
General and administrative	5,790	6,934
Total operating expenses	$ 34,606	$ 34,343
Loss from operations	(34,606)	(34,343)
Other income, net	2,521	2,912
Net loss	$ (32,085)	$ (31,431)

10. Stock-Based Compensation

The Company has two equity incentive plans: the 2016 Equity Incentive Plan, as amended, and the 2020 Equity Incentive Plan. New awards can only be granted under the 2020 Equity Incentive Plan (the "Plan") and as of March 31, 2025, 5,414,154 shares were available for future grants. The number of shares of the Company's common stock that may be issued pursuant to rights granted under the Plan shall automatically increase on January 1st of each year and continuing for ten years beginning on January 1, 2021, in an amount equal to five percent of the total number of shares of the Company's common stock outstanding on December 31st of the preceding calendar year, subject to the discretion of the Company's board of directors or compensation committee to determine a lesser number of shares shall be added for such year. On January 1, 2025, 2,757,455 shares were added to the Plan. The Plan provides for the granting of common stock, incentive stock options, nonqualified stock options, restricted stock awards, restricted stock units and/or stock appreciation rights to employees, directors, and other persons, as determined by the Company's board of directors. The Company's stock options vest based on the terms in each award agreement, generally over four-year periods with 25% of options vesting after one year and then monthly thereafter, and have a term of ten years.

The Company measures stock-based awards at their grant-date fair value and records compensation expense on a straight-line basis over the vesting period of the awards. The Company recorded stock-based compensation expense in the following expense categories in its accompanying statements of operations:

	Three Months Ended March 31,	
(in thousands)	2025	2024
Research and development	$ 2,270	$ 3,010
General and administrative	1,562	2,537
	$ 3,832	$ 5,547

Stock Options

The following table summarizes stock option activity for the periods indicated:

	Number of shares	Weighted average exercise price per share	Weighted average remaining contractual term (years)
Outstanding at January 1, 2025	14,212,538	$ 9.07	7.30
Granted	3,328,000	$ 1.11	
Exercised	—		
Forfeited	(901,470)	$ 8.56	
Outstanding at March 31, 2025	16,639,068	$ 7.50	7.59
Exercisable at March 31, 2025	8,822,674	$ 10.72	6.34

At March 31, 2025, the aggregate intrinsic value of both outstanding options and exercisable options was $6 thousand.

The following table summarizes information about stock options outstanding at March 31, 2025 under the Plan:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$0.31 - $1.66	3,583,944	9.33	$ 1.12	290,444	$ 1.22
$1.67 - $4.66	5,073,952	7.56	3.60	2,390,279	2.75
$4.67 - $10.34	3,815,463	7.69	6.23	2,298,502	6.11
$10.35 - $88.98	4,165,709	6.05	18.91	3,843,449	19.15
	16,639,068			8,822,674	

The weighted-average grant date fair value of options granted was $1.11 and $3.40 per option for the three months ended March 31, 2025 and 2024, respectively. The Company recorded stock-based compensation expense of $3.7 million and $5.3 million

for the three months ended March 31, 2025 and 2024, respectively, related to stock options. As of March 31, 2025, the total unrecognized compensation expense related to unvested stock option awards was $20.5 million, which the Company expects to recognize over a weighted-average period of 2.18 years.

The fair value of each option was estimated on the date of grant using the weighted average assumptions in the table below:

	Three months ended March 31,	
	2025	2024
Expected volatility	86.50%	85.12%
Risk-free interest rate	4.32%	4.14%
Expected life (in years)	6.07	6.07
Expected dividend yield	—	—

Restricted Stock Units

The Company granted restricted stock units ("RSU") to employees that generally vest over a four-year period with 25% of awards vesting after one year and then quarterly thereafter. Any unvested units will be forfeited upon termination of services.

The following table summarizes activity related to RSU stock-based payment awards:

	Number of shares	Weighted-average grant date fair value
Unvested balance at January 1, 2025	56,250	$ 4.86
Granted	349,500	$ 1.11
Vested	(9,375)	$ 4.86
Forfeited	(11,500)	$ 1.11
Unvested balance at March 31, 2025	384,875	$ 1.57

The Company recorded stock-based compensation expense of $0.1 million for both the three months ended March 31, 2025 and 2024, related to RSUs. At March 31, 2025, the total unrecognized expense related to the RSUs was $0.5 million, which the Company expects to recognize over 2.92 years.

Employee Stock Purchase Plan

The Company has an Employee Stock Purchase Plan (the "ESPP"), which, as of March 31, 2025, had 2,527,061 shares of common stock reserved for future issuance. The number of shares of the Company's common stock that may be issued pursuant to rights granted under the ESPP shall automatically increase on January 1st of each year and continuing for ten years beginning in 2021, in an amount equal to one percent of the total number of shares of all classes of the Company's common stock outstanding on December 31st of the preceding calendar year, subject to the discretion of the Company's board of directors or compensation committee to determine a lesser number of shares shall be added for such year. On January 1, 2025, 551,491 shares were added to the ESPP.

Under the ESPP, eligible employees can purchase the Company's common stock through accumulated payroll deductions at such times as are established by the Company's compensation committee. Eligible employees may purchase the Company's common stock at 85% of the lower of the fair market value of the Company's common stock on the first day of the offering period or on the last day of the offering period. Eligible employees may contribute up to 15% of their eligible compensation. Under the ESPP, a participant may not accrue rights to purchase more than $25,000 worth of the Company's common stock for each calendar year in which such right is outstanding.

The ESPP is considered compensatory under the FASB stock compensation rules. Accordingly, share-based compensation expense is determined based on the option's grant-date fair value as estimated by applying the Black Scholes option-pricing model and is recognized over the withholding period. The Company recognized share-based compensation expense of $40 thousand and $60 thousand, respectively, for the three months ended March 31, 2025 and 2024 related to the ESPP.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q. In addition to historical financial information, this discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties, such as statements of our plans, objectives, expectations, intentions and belief. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Risk Factors" under Part I, Item 1A of our Annual Report on Form 10-K filed with the SEC on March 10, 2025, or our 2024 Annual Report on Form 10-K. These forward-looking statements may include, but are not limited to, statements regarding our future results of operations and financial position, our ability to develop our clinical candidates, inflation and interest rate risk, a potential recession, a potential temporary federal government shutdown, business strategy, market size, potential growth opportunities, preclinical and clinical development activities, efficacy and safety profile of our product candidates, use of net proceeds from our offerings, our ability to maintain and recognize the benefits of certain designations received by product candidates, the timing and results of preclinical studies and clinical trials, commercial collaborations with third parties and the receipt and timing of potential regulatory designations, approvals and commercialization of product candidates. The words "believes," "anticipates," "estimates," "plans," "expects," "intends," "may," "could," "should," "potential," "likely," "projects," "continue," "will," "schedule," and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and while we believe such information forms 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.

Overview

Prelude is a clinical-stage precision oncology company built on a foundation of drug discovery excellence to deliver novel precision cancer medicines to underserved patients. By leveraging our core competencies in cancer biology and medicinal chemistry, combined with our clinical development capabilities, we have built an efficient, drug discovery engine and the development expertise necessary to identify compelling biological targets and create new chemical entities, or NCEs, that we advance into clinical trials. We believe our approach could result in better targeted cancer therapies. Our discovery excellence has been supported by our steady progress in creating a wholly-owned, internally developed pipeline. We also are working with our partner AbCellera Biologics Incorporated ("AbCellera") on an early-stage discovery program involving potent degraders as payloads for novel antibodies targeting tumor specific antigens. Since our inception in 2016, we have received clearance from the U.S. Food and Drug Administration, or the FDA, for multiple investigational new drug applications, or INDs, and successfully advanced several programs into clinical trials. In addition, we have other differentiated proprietary programs in various stages of preclinical development.

By focusing on developing molecules using broad mechanisms that have multiple links to oncogenic driver pathways in select patients, we have developed a diverse pipeline consisting of multiple distinct programs including kinases, targeted protein degraders, and precision antibody drug conjugates. Our pipeline is designed to serve patients with high unmet medical need, where there are limited or no treatment options. We believe we can best address these diseases by developing therapies that target primary and secondary resistance mechanisms.

We have several drug candidates in clinical development and our objective is to generate proof-of-concept clinical data to guide our future regulatory pathways to approval.

Our novel, first-in-class SMARCA2 degrader compounds represent our best opportunities for demonstrating clinical proof-of-concept in 2025 and advancing into potential Phase 2/3 registration studies.

PRT3789 is a first-in-class, highly selective degrader of SMARCA2 protein, which along with SMARCA4 controls gene regulation through chromatin remodeling. Cancer cells with SMARCA4 mutations are dependent on SMARCA2 for their growth and survival and selectively degrading SMARCA2 induces cell death in cancer cells while sparing normal cells in preclinical models. PRT3789 has been shown to be efficacious and well tolerated in multiple preclinical models of SMARCA4 deleted/mutated cancers as monotherapy and in combination with standards of care therapies. We believe a selective SMARCA2 degrader has the potential to be of benefit in up to 10% of non-small cell lung cancer, or NSCLC, patients in the United States including many other tumor types with the SMARCA4 mutation.

Patients with SMARCA4 mutated cancer have a poor clinical prognosis. We believe this represents an area of high unmet medical need. Therefore, mutated or deleted SMARCA4 cancers provide a potential biomarker to select those patients most likely to respond to treatment with a highly selective SMARCA2 degrader.

PRT3789 is in Phase 1 clinical development in patients with biomarker selected SMARCA4-mutated cancers. We have completed enrollment of monotherapy dose escalation at the 665 mg once weekly IV dose and have selected 500 mg once weekly as the recommended Phase 2 dose. In addition, we have completed dose escalation in the combination of PRT3789 with docetaxel and we are nearing completion of backfill cohorts. Updated data from the trial is expected to be presented at a major medical meeting in the second half of 2025.

We are enrolling patients in a Phase 2 clinical trial evaluating PRT3789 in combination with KEYTRUDA (pembrolizumab) in patients with SMARCA4-mutated cancers, per the previously announced collaboration with Merck (known as MSD outside of the US and Canada).

Our discovery team has identified a series of potent, selective and orally bioavailable SMARCA2 degraders. In July 2024, we received IND clearance for the lead oral molecule, PRT7732. PRT7732 is >1000-fold selective for SMARCA2 vs. SMARCA4 and demonstrates robust activity in SMARCA4 deficient cancer models both as monotherapy and in combination with docetaxel at well-tolerated doses. PRT7732 demonstrates good oral bioavailability and half-life suitable for once daily oral dosing. In the fourth quarter of 2024, the we initiated and enrolled the first patients in a phase 1 multi-dose escalation trial of PRT7732 (NCT06560645) in biomarker selected SMARCA4 mutated cancers. Enrollment has advanced rapidly and we are currently enrolling patients in the fifth dose escalation cohort (60 mg once daily). We expect to provide an initial first-in-human data update at a major medical meeting in the second half of 2025.

As one of our first precision ADC programs we and our partner AbCellera began work on an early-stage discovery program involving potent degraders of the SMARCA family of proteins as payloads for novel antibodies targeting tumor specific antigens. Given the potent anti-tumor activity of these molecules in pre-clinical models of cancers beyond those targeted by our SMARCA2 selective degraders, we believe that these precision ADCs have the potential to extend the therapeutic utility of this class. The partnership includes up to five precision ADC targets. Under the terms of the agreement, we and AbCellera will jointly discover, develop, and commercialize products emerging from the collaboration. AbCellera will lead manufacturing activities and we will lead clinical development and global commercialization, subject to AbCellera's option to co-promote any resulting commercial products in the United States.

Outside of the AbCellera collaboration, we have discovered and optimized a number of pre-clinical precision payloads. We disclosed first data at the 36th EORTC-NCI-AACR Symposium describing preclinical proof-of-concept using a novel, potent SMARCA2/4 dual degrader as a "Precision Payload" conjugated to multiple antibodies. Prelude's SMARCA2/4 dual degraders have shown picomolar potency with potential for increased efficacy, selectivity and improved therapeutic index. Precision ADCs have potential to expand the reach of SMARCA degrader technology to cancers without SMARCA4 mutations.

We have discovered and are developing a series of selective and orally bioavailable KAT6A degraders. Optimized lead compounds are advancing to candidate nomination in the second quarter of 2025 with intent to file an IND in 2026. KAT6 is a clinically validated target with promising activity in breast cancer and other solid tumors. We recently presented preclinical data from this program at the American Association for Cancer Research (AACR) 2025 Annual Meeting. We intend to develop this program to IND and are open to development with a partner.

Our CDK9 candidate, PRT2527, is a potent and highly selective CDK9 inhibitor that has the potential to avoid off-target toxicities observed with other less selective CDK9 inhibitors. We presented interim phase 1 results of the dose-escalation study as part of a poster session at the 66th American Society of Hematology Annual Meeting (ASH) in the fourth quarter of 2024. PRT2527 demonstrated activity across a range of relapsed/refractory lymphoid malignancies, including patients who received prior CAR-T therapy. We also announced that we intend to seek a partner for any future continued advancement of PRT2527, as a result of our strategic focus on the SMARCA2 degrader development program.

Nasdaq Delisting Notice

On March 27, 2025, the Company received a letter (the "Bid Price Notice") from the Listing Qualifications staff (the "Staff") of The Nasdaq Stock Market LLC ("Nasdaq") indicating that, based upon the closing bid price of the Company's common stock for the prior 30 consecutive business days, the Company was not in compliance with the requirement to maintain a minimum bid price of $1.00 per share for continued listing on Nasdaq, as set forth in Nasdaq Listing Rule 5550(a)(2) (the "Minimum Bid Price Requirement").

The Bid Price Notice has no immediate effect on the continued listing status of the Company's common stock on Nasdaq, and, therefore, the Company's listing remains fully effective.

In accordance with Nasdaq Listing Rule 5810(c)(3)(A), the Company has been provided an initial compliance period of 180 calendar days, or until September 23, 2025, in which to regain compliance with the deficiency. In order to regain compliance with the Minimum Bid Price Requirement, the closing bid price of the common stock must be at least $1.00 per share for a minimum of ten consecutive business days during this 180-day period. If the Company does not regain compliance with this requirement by September 23, 2025, the Company may be eligible for an additional 180 calendar day compliance period provided that (i) the Company meets all

other continued listing standards and (ii) the Company provides written notice to Nasdaq of its intention to cure the deficiency during the second grace period, generally by effecting a reverse stock split, if necessary.

If the Company does not regain compliance within the allotted compliance period(s), including any extensions that may be granted by Nasdaq, Nasdaq will provide notice that the Common Stock will be subject to delisting. At that time, the Company may appeal the Staff's determination to a Nasdaq Hearings Panel.

The Company intends to monitor the closing bid price of the common stock and consider its available options to resolve the noncompliance with the Minimum Bid Price Requirement.

There can be no assurance that the Company will be able to regain compliance with the Minimum Bid Price Requirement or will otherwise be in compliance with other Nasdaq listing criteria.

Components of Results of Operations

Since inception, we have devoted substantially all of our resources to developing product and technology rights, conducting research and development, organizing and staffing our company, business planning and raising capital. We have incurred recurring losses, the majority of which are attributable to research and development activities, and negative cash flows from operations. We have funded our operations primarily through the sale of convertible preferred stock, common stock and pre-funded warrants. Our net loss was $32.1 million and $31.4 million for the three months ended March 31, 2025 and 2024, respectively. As of March 31, 2025, we had an accumulated deficit of $615.6 million. Our primary use of cash is to fund operating expenses, which consist primarily of research and development expenditures, and to a lesser extent, general and administrative expenditures. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more of our current or future product candidates. We expect to continue to incur significant expenses and operating losses for the foreseeable future as we advance our product candidates through all stages of development and clinical trials and, ultimately, seek regulatory approval. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials and our expenditures on other research and development activities.

Revenue

To date, we have not recognized any revenue from product sales, and we do not expect to generate any revenue in the foreseeable future. If our development efforts for our product candidates are successful and result in regulatory approval, or license agreements with third parties, we may generate revenue in the future from product sales. However, there can be no assurance as to when we will generate such revenue, if at all.

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred in connection with the discovery and development of our product candidates. We expense research and development costs as incurred, including:

- expenses incurred to conduct the necessary discovery-stage laboratory work, preclinical studies and clinical trials required to obtain regulatory approval;
- personnel expenses, including salaries, benefits and stock-based compensation expense for our employees engaged in research and development functions;
- costs of funding research performed by third parties, including pursuant to agreements with clinical research organizations, or CROs, that conduct our clinical trials, as well as investigative sites, consultants and CROs that conduct our preclinical and nonclinical studies;
- expenses incurred under agreements with contract manufacturing organizations, or CMOs, including manufacturing scale-up expenses and the cost of acquiring and manufacturing preclinical study and clinical trial materials;
- fees paid to consultants who assist with research and development activities;
- expenses related to regulatory activities, including filing fees paid to regulatory agencies; and
- allocated expenses for facility costs, including rent, utilities, depreciation and maintenance.

We track outsourced development costs and other external research and development costs to specific product candidates on a program-by-program basis, fees paid to CROs, CMOs and research laboratories in connection with our preclinical development, process development, manufacturing and clinical development activities. However, we do not track our internal research and development expenses on a program-by-program basis as they primarily relate to compensation, early research and other costs which are deployed across multiple projects under development.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect to continue to incur research and development expenses over the next several years related to personnel costs, including stock-based compensation, clinical trials, including later-stage clinical trials, for current and future product candidates and preparing regulatory filings for our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel expenses, including salaries, benefits and stock-based compensation expense, for employees and consultants in executive, finance and accounting, legal, operations support, information technology and human resource functions. General and administrative expense also includes corporate facility costs not otherwise included in research and development expense, including rent, utilities, depreciation and maintenance, as well as legal fees related to intellectual property and corporate matters and fees for accounting and consulting services.

We expect to continue to incur general and administrative expense in the future to support our continued research and development activities and potential commercialization efforts. These expenses will likely include costs related to the hiring of personnel and fees to outside consultants and legal support, among other expenses. The costs associated with being a public company include expenses related to services associated with maintaining compliance with the requirements of Nasdaq and the Securities and Exchange Commission, or SEC, insurance and investor relations costs. If any of our current or future product candidates obtains U.S. regulatory approval, we expect that we would incur significantly increased expenses associated with building a sales and marketing team.

Other Income, Net

Other income, net consists primarily of interest earned on our cash equivalents and marketable securities and grant income received from the State of Delaware. We anticipate re-applying for grants from the State of Delaware from time to time as long as we maintain qualifying headcount levels.

Income Taxes

Since our inception, we have not recorded any income tax benefits for the net operating losses, or NOLs, we have incurred or for our research and development tax credits, as we believe, based upon the weight of available evidence, that it is more likely than not that all of our NOLs and tax credits will not be realized.

Results of Operations

Comparison of the Three Months Ended March 31, 2025 and 2024

The following table sets forth our results of operations.

(in thousands)	Three months ended March 31, 2025	2024	Change
Operating expenses:			
Research and development	$ 28,816	$ 27,409	$ 1,407
General and administrative	5,790	6,934	(1,144)
Total operating expenses	34,606	34,343	263
Loss from operations	(34,606)	(34,343)	(263)
Other income, net	2,521	2,912	(391)
Net loss	$ (32,085)	$ (31,431)	$ (654)

Research and Development Expenses

Research and development expenses increased from $27.4 million for the three months ended March 31, 2024 to $28.8 million for the three months ended March 31, 2025. Included in research and development expenses for the three months ended March 31, 2025, was $2.3 million of non-cash expense related to stock-based compensation expense, including employee stock options, compared to $3.0 million for the three months ended March 31, 2024. Research and development expenses increased primarily due to an increase in expense related to our SMARCA2 clinical trials. Research and development expenses may fluctuate from period to period depending upon the stage of certain projects and the level of preclinical and clinical trial-related activities.

Research and development expenses by program are summarized in the table below. Expenses for programs that have been discontinued are included in Other.

	Three months ended March 31,	
(in thousands)	**2025**	**2024**
PRT3789	$ 4,493	$ 4,161
PRT7732	2,979	—
Discovery programs	2,468	5,190
Other	2,429	2,865
General costs, including personnel related	16,447	15,193
	$ 28,816	$ 27,409

General and Administrative Expenses

General and administrative expenses decreased from $6.9 million for the three months ended March 31, 2024 to $5.8 million for the three months ended March 31, 2025. The decrease was primarily driven by a decrease in non-cash expense related to stock-based compensation expense. Included in general and administrative expenses for the three months ended March 31, 2025, was $1.6 million of non-cash expense related to stock-based compensation expense compared to $2.5 million for the three months ended March 31, 2024, due to the tapering off of the vesting period of prior granted options and lower valuation on more recent grants due to the decrease in our stock price.

Other Income, net

Other income, net decreased from $2.9 million for the three months ended March 31, 2024, to $2.5 million for the three months ended March 31, 2025 primarily due to lower income earned our investments due to lower balances offset by the receipt and recognition of research and development tax credits.

Liquidity and Capital Resources

Overview

Since our inception, we have not recognized any product revenue and have incurred operating losses and negative cash flows from our operations. We have not yet commercialized any product and we do not expect to generate revenue from sales of any products for several years, if at all.

At March 31, 2025 the Company had cash, cash equivalents, restricted cash and marketable securities totaling $103.1 million. Absent additional funding, the Company believes that its cash, cash equivalents, restricted cash and marketable securities will not be sufficient fund its operating expenses and capital expenditure requirements for at least the next twelve months from the filing date of this Quarterly Report on Form 10-Q. As a result, substantial doubt exists about our ability to continue as a going concern.

Since our inception, we have funded our operations primarily through the sale of convertible preferred stock, common stock, and pre-funded warrants. We will need to raise substantial additional capital to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we plan to finance our operations through the sale of equity, debt financings or other capital sources, which may include collaborations with other companies or other strategic transactions. There are no assurances that we will be successful in obtaining an adequate level of financing as and when needed to finance our operations on terms acceptable to us or at all. Any failure to raise capital as and when needed could have a negative impact

on our financial condition and on our ability to pursue our business plans and strategies. If we are unable to secure adequate additional funding, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more product candidates or delay our pursuit of potential in-licenses or acquisitions.

Funding Requirements

Our primary use of cash is to fund operating expenses, primarily research and development expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable, accrued expenses and prepaid expenses.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the scope, timing, progress and results of discovery, preclinical development, laboratory testing and clinical trials for our product candidates;
- the costs of manufacturing our product candidates for clinical trials and in preparation for marketing approval and commercialization;
- the extent to which we enter into collaborations or other arrangements with additional third parties in order to further develop our product candidates;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- the costs and fees associated with the discovery, acquisition or in-license of additional product candidates or technologies;
- expenses needed to attract and retain skilled personnel;
- costs associated with being a public company;
- the costs required to scale up our clinical, regulatory and manufacturing capabilities;
- the costs of future commercialization activities, if any, including establishing sales, marketing, manufacturing and distribution capabilities, for any of our product candidates for which we receive marketing approval; and
- revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval.

We will need additional funds to meet operational needs and capital requirements for clinical trials, other research and development expenditures, and business development activities. We currently have no credit facility or committed sources of capital. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical studies.

In May 2024, the Company filed a shelf registration statement (the "2024 Shelf Registration Statement") with the SEC for the issuance of common stock, preferred stock, debt securities, warrants, subscription rights and units up to an aggregate amount of $400 million. The 2024 Shelf Registration statement was declared effective on June 10, 2024. The 2024 Shelf Registration statement expires in May 2027, and as of March 31, 2025 there was $400 million remaining under the 2024 Shelf Registration Statement.

In March 2023, in connection with filing a prospectus supplement to our shelf registration statement previously filed in November 2021 (the “2021 Shelf Registration Statement"), we entered into an Open Market Sales Agreement (the "Sales Agreement") with Jefferies LLC, as the sales agent, pursuant to which we may offer and sell shares of our common stock having an aggregate offering amount of up to $75.0 million. We will pay Jefferies LLC a commission rate of up to 3.0% of the aggregate gross proceeds from the sale of any shares of common stock pursuant to the Sales Agreement. In November 2024, the 2021 Shelf Registration Statement expired with respect to the shares to be sold under the Sales Agreement. Accordingly, we expect to file a prospectus supplement to the 2024 Shelf Registration Statement in order to continue to allow us to access the Sales Agreement. We have $75.0 million remaining under the Sales Agreement as of March 31, 2025.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants

limiting or restricting our ability to take specific actions, such as incurring additional debt, making acquisitions or capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce or terminate our research, product development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Cash Flows

The following table shows a summary of our cash flows for the periods indicated:

	Three months ended March 31,	
(in thousands)	**2025**	**2024**
Net cash used in operating activities	$ (34,231)	$ (31,791)
Net cash provided by investing activities	62,186	31,221
Net cash used in financing activities	(160)	(14)
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 27,795	$ (584)

Operating Activities

During the three months ended March 31, 2025, we used $34.2 million of cash in operating activities. Cash used in operating activities reflected our net loss of $32.1 million and a $6.9 million net increase in our operating assets and liabilities offset by noncash charges of $4.7 million, which primarily consisted of stock-based compensation. The primary use of cash was to fund our operations related to the development of our product candidates.

During the three months ended March 31, 2024, we used $31.8 million of cash in operating activities. Cash used in operating activities reflected our net loss of $31.4 million and a $5.2 million net increase in our operating assets and liabilities, offset by noncash charges of $4.8 million, which primarily consisted of stock-based compensation. The primary use of cash was to fund our operations related to the development of our product candidates.

Investing Activities

During the three months ended March 31, 2025, net cash provided by investing activities of $62.2 million consisted primarily of $71.7 million in proceeds from maturities of marketable securities, partially offset by $9.5 million in purchases of marketable securities. During the three months ended March 31, 2024, net cash used in investing activities of $31.2 million consisted primarily of $37.0 million in proceeds from maturities of marketable securities, partially offset by $5.5 million in purchases of marketable securities.

Financing Activities

For the three months ended March 31, 2025 net cash used in financing activities was primarily for principal payments on our finance lease.

Critical Accounting Estimates

During the three months ended March 31, 2025, there were no other material changes to our critical accounting policies and estimates from those described under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations-Critical Accounting Estimates” in our 2024 Annual Report on Form 10-K.

Emerging Growth Company and Smaller Reporting Company Status

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards

until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from complying with new or revised accounting standards and, therefore, will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Subject to certain conditions, as an emerging growth company, we may rely on certain other exemptions and reduced reporting requirements, including without limitation, exemption to the requirements for providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. We will remain an emerging growth company until the earlier to occur of (a) the last day of the fiscal year (i) following the fifth anniversary of the completion of our initial public offering (i.e. December 31, 2025), (ii) in which we have total annual gross revenues of at least $1.235 billion or (iii) in which we are deemed to be a "large accelerated filer" under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, or (b) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

We are also a "smaller reporting company," meaning that the market value of our stock held by non-affiliates is less than $700.0 million and our annual revenue is less than $100.0 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after if either (i) the market value of our stock held by non-affiliates is less than $250.0 million or (ii) our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700.0 million. If we remain a smaller reporting company once we cease to be an emerging growth 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.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item with respect to the period ending March 31, 2025.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedure

As of March 31, 2025, management, with the participation of our Principal Executive Officer and Principal Financial and Accounting Officer, performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including the Principal Executive Officer and the Principal Financial and Accounting Officer, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our Principal Executive Officer and Principal Financial and Accounting Officer concluded that, as of March 31, 2025, the design and operation of our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control over Financial Reporting

Management determined that, as of March 31, 2025, there were no changes in our internal control over financial reporting that occurred during the fiscal quarter then ended that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II— OTHER INFORMATION

Item 1. Legal Proceedings.

From time to time, we may be involved in legal proceedings arising in the ordinary course of our business. In addition, we may receive letters alleging infringement of patents or other intellectual property rights. We are not presently a party to any legal proceedings that, in the opinion of management, would have a material adverse effect on our business, operating results, cash flows or financial conditions should such litigation be resolved unfavorably. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity and reputational harm, and other factors.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. Before making your decision to invest in shares of our common stock, you should carefully consider the risks and uncertainties described under Part I, Item 1A, "Risk Factors" in our 2024 Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 10, 2025 in addition to the risk factor below.

If we are unable to comply with the continued listing requirements of the Nasdaq Capital Market, our common stock could be delisted, which could affect our common stock's market price and liquidity and reduce our ability to raise capital.

Our common stock is listed on Nasdaq, which imposes continued listing requirements with respect to issuers whose securities are listed on Nasdaq. If we fail to satisfy the continued listing standards, such as, for example, Nasdaq's Minimum Bid Price Requirement, Nasdaq may issue a non-compliance letter or initiate delisting proceedings.

As previously disclosed, on March 27, 2025, we received such a letter from the Staff notifying us that based upon the closing bid price of the Company's common stock, for the prior 30 consecutive business days, the Company was not in compliance with the requirement to maintain a minimum bid price of $1.00 per share for continued listing on Nasdaq, as set forth in Nasdaq Listing Rule 5550(a)(2).

In accordance with Nasdaq Listing Rule 5810(c)(3)(A), the Company has been provided an initial compliance period of 180 calendar days, or until September 23, 2025, in which to regain compliance with the deficiency. In order to regain compliance with the Minimum Bid Price Requirement, the closing bid price of the Common Stock must be at least $1.00 per share for a minimum of ten consecutive business days during this 180-day period. If the Company does not regain compliance with this requirement by September 23, 2025, the Company may be eligible for an additional 180 calendar day compliance period provided that (i) the Company meets all other continued listing standards and (ii) the Company provides written notice to Nasdaq of its intention to cure the deficiency during the second grace period, by effecting a reverse stock split, if necessary.

If the Company does not regain compliance within the allotted compliance period(s), including any extensions that may be granted by Nasdaq, Nasdaq will provide notice that the common stock will be subject to delisting. At that time, the Company may appeal the Staff's determination to a Nasdaq Hearings Panel.

If we are unable to maintain compliance with the continued listing requirements of Nasdaq, our common stock could be delisted, making it more difficult to buy or sell our securities and to obtain accurate quotations, and the price of our securities could suffer a material decline. Delisting could also impair our ability to raise capital.

Our financial statements contain a statement regarding a substantial doubt about the Company's ability to continue as a going concern.

We had no revenue during the three months ended March 31, 2025. Our primary uses of cash are to fund our planned clinical trials, research and development expenditures and for operating expenses. Cash used to fund operating expenses is based on the assumption that we will continue as a going concern, which contemplates the realization of assets and liquidation of liabilities in the normal course of business. We face certain risks and uncertainties that are present in many emerging pharmaceutical companies regarding product development, limited working capital, recurring losses and negative cash flow from operations, future profitability, ability to obtain future capital, protection of patents, technologies and property rights, competition, navigating the domestic and major foreign markets' regulatory and clinical environment, recruiting and retaining key personnel, dependence on third party manufacturing organizations, third party collaboration and licensing agreements, lack of sales and marketing activities. We currently have no customers or pharmaceutical products to sell or distribute. Absent additional funding, we believe that our cash, cash equivalents, and marketable securities will not be sufficient to fund our operating expenses and capital expenditure requirements for at least the next twelve months from the filing date of this Quarterly Report on Form 10-Q. These risks and other factors raise substantial doubt about our ability to continue as a going concern.

Our ability to continue as a going concern is dependent on our ability to obtain the necessary financing to meet our obligations and repay our liabilities arising from the ordinary course of business operations when they become due. The substantial doubt about our ability to continue as a going concern may affect the price of our common stock, may impact our relationship with third parties with whom we do business and may impact our ability to raise additional capital.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Furnish the exhibits required by Item 601 of Regulation S-K (§ 229.601 of this chapter).

Exhibit Number	Description	Form	File No.	Exhibit No.	Exhibit Filing Date	Filed/Furnished Herewith
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File as its XBRL tags are embedded within the Inline XBRL document					X
101.SCH	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

**The certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-Q and are not deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall they be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.*

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Prelude Therapeutics Incorporated

Date: May 6, 2025

By: /s/ Krishna Vaddi
Krishna Vaddi, PhD
Chief Executive Officer
(Principal Executive Officer)

Date: May 6, 2025

By: /s/ Bryant Lim
Bryant Lim
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Krishna Vaddi, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Prelude Therapeutics Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2025

By: /s/ Krishna Vaddi
Krishna Vaddi, PhD
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Bryant Lim, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Prelude Therapeutics Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2025

By: /s/ Bryant Lim
Bryant Lim
Chief Financial Officer
(Principal Accounting and Financial Officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Krishna Vaddi, Chief Executive Officer of Prelude Therapeutics Incorporated (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the fiscal quarter ended March 31, 2025 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 6, 2025

By: /s/ Krishna Vaddi

Krishna Vaddi, PhD
Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Bryant Lim, Chief Financial Officer of Prelude Therapeutics Incorporated (the "Company"), do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) the Quarterly Report on Form 10-Q of the Company for the fiscal quarter ended March 31, 2025 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 6, 2025

By: /s/ Bryant Lim
Bryant Lim
Chief Financial Officer
(Principal Accounting and Financial Officer)