UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 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, 2024

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 001-41536

Prime Medicine, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**84-3097762**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
21 Erie Street, Cambridge, MA	**02139**
(Address of principal executive offices)	**(Zip code)**

(617) 564-0013

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

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 $0.00001 per share	**PRME**	Nasdaq Global 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting 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 May 1, 2024, the registrant had 120,030,813 shares of common stock, par value $0.00001 per share, outstanding.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains express or implied statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, and objectives of management, are forward-looking statements, which are based on management's belief and assumptions and on information currently available to our management. These statements involve substantial risks, assumptions and uncertainties. The words "anticipate," "believe," "envision," "estimate," "expect," "goal," "intend," "may," "plan," "predict," "project," "strategy," "target," "potential," "will," "would," "could," "should," "continue," "contemplate," "vision" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this Quarterly Report on Form 10-Q include statements about:

- the initiation, timing, progress and results of our research and development programs, product candidates, preclinical studies and future clinical trials;
- our ability to demonstrate, and the timing of, preclinical proof-of-concept in vivo for multiple programs;
- our ability to advance any current and future product candidates that we may identify and successfully complete any clinical studies, including the manufacture of any such product candidates;
- our ability to pursue our areas of focus and any other additional programs we may advance;
- our ability to quickly leverage programs within our initial target indications and to progress additional programs to further develop our pipeline;
- the timing of our investigational new drug application submissions;
- the ability of our Prime Editing technology to address unmet medical needs in patients;
- the implementation of our strategic plans for our business, programs and technology;
- the scope and duration of protection we are able to establish and maintain for intellectual property rights covering our Prime Editing technology;
- developments related to our competitors and our industry;
- our ability to leverage the clinical, regulatory, and manufacturing advancements made by gene therapy and gene editing programs to accelerate our clinical trials and approval of product candidates;
- our ability to identify and enter into future license agreements and collaborations;
- developments related to our Prime Editing technology;
- regulatory developments in the United States and foreign countries;
- our ability to attract and retain key scientific and management personnel;
- our estimates of our expenses, capital requirements, needs for additional financing;
- the effect of unfavorable macroeconomic conditions or market volatility resulting from global economic conditions, and;
- other risks and uncertainties, including those listed under the caption "Risk Factors."

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and these statements may be affected by inaccurate assumptions or by known or unknown risks and uncertainties. You should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this Quarterly Report on Form 10-Q and in subsequent SEC filings, particularly in the "Risk Factors" section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Unless otherwise disclosed, our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures or investments we may make or enter into.

You should read this Quarterly Report on Form 10-Q and the documents that we reference herein and have filed as exhibits to our other filings with the Securities and Exchange Commission (the "SEC") completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this Quarterly Report on Form 10-Q are made as of the date hereof, and we do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise after the date of such statements, except as required by applicable law.

This Quarterly Report on Form 10-Q also contains estimates, projections and other information concerning our industry, our business and the markets for our product candidates. Such information is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. While we are not aware of any misstatements regarding any third-party information presented in this Quarterly Report on Form 10-Q, their estimates, in particular as they relate to projections, involve numerous assumptions, are subject to risks and uncertainties and are subject to change based on various factors, including those discussed under the section titled "Risk Factors" set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q, if any, our Annual Report on Form 10-K that was filed with the SEC on March 1, 2024, and in other SEC filings.

PRIME MEDICINE, INC.

FORM 10-Q

FOR THE THREE MONTHS ENDED MARCH 31, 2024

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From time to time we may use our website, our X (formerly known as Twitter) account (@PrimeMedicine) or our LinkedIn profile at https://www.linkedin.com/company/prime-medicine to distribute material information. Our financial and other material information is routinely posted to and accessible on the Investors section of our website, available at www.primemedicine.com. Investors are encouraged to review the Investors section of our website because we may post material information on that site that is not otherwise disseminated by us. Information that is contained in and can be accessed through our website or our social media is not incorporated into, and does not form a part of, this Quarterly Report on Form 10-Q.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements (unaudited)

PRIME MEDICINE, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)

(in thousands, except share and per share amounts)	March 31, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 94,162	$ 41,574
Short-term investments	109,943	74,639
Short-term investment — related party	6,618	5,452
Prepaid expenses	4,203	19,057
Other current assets	2,728	2,254
Total current assets	217,654	142,976
Property and equipment, net	23,926	22,659
Operating lease right-of-use assets	55,528	13,941
Restricted cash	13,496	13,496
Other assets	779	779
Total assets	$ 311,383	$ 193,851
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 10,078	$ 19,537
Accrued expenses and other current liabilities [1]	7,612	14,110
Accrued settlement payment — related party	—	13,500
Operating lease liability	6,751	9,276
Total current liabilities	24,441	56,423
Operating lease liability, net of current	37,042	4,357
Non current deferred tax liability	134	—
Research and development funding liability	6,000	—
Total liabilities	67,617	60,780
Commitments and contingencies		
Stockholders' equity		
Common stock, par value of $0.00001 per share; 775,000,000 shares authorized; 120,021,274 and 97,377,121 shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively	2	2
Additional paid-in capital	780,950	624,414
Accumulated other comprehensive loss	(95)	(15)
Accumulated deficit	(537,091)	(491,330)
Total stockholders' equity	243,766	$ 133,071
Total liabilities and stockholders' equity	$ 311,383	$ 193,851

(1) Includes related party amount of $0.3 million as of December 31, 2023.

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PRIME MEDICINE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Unaudited)

(in thousands, except share and per share amounts)	Three Months Ended March 31, 2024	2023
Collaboration revenue	$ 591	$ —
Operating expenses:		
Research and development [1]	37,774	30,880
General and administrative	11,158	9,153
Total operating expenses	48,932	40,033
Loss from operations	(48,341)	(40,033)
Other income:		
Change in fair value of short-term investment — related party	1,166	(1,701)
Other income, net	1,548	2,135
Total other income, net	2,714	434
Net loss before income taxes	(45,627)	(39,599)
(Provision for) benefit from income taxes	(134)	202
Net loss attributable to common stockholders	$ (45,761)	$ (39,397)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.44)	$ (0.44)
Weighted-average common shares outstanding, basic and diluted	104,466,178	89,064,895
Comprehensive loss:		
Net loss	$ (45,761)	$ (39,397)
Change in unrealized loss on investments, net of tax	(80)	179
Comprehensive loss	$ (45,841)	$ (39,218)

(1) Includes related party amount of $0.3 million for the three months ended March 31, 2023.

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PRIME MEDICINE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

(in thousands, except share amounts)	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Losses	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance as of December 31, 2023	97,377,121	$ 2	$ 624,414	$ (15)	$ (491,330)	$ 133,071
Issuance of common stock from public offering, net of issuance costs of $8.9 million	22,560,001	—	132,055	—	—	132,055
Issuance of pre-funded warrants, net of issuance costs of $1.2 million	—	—	18,800	—	—	18,800
Issuances of common under ESPP	74,488	—	436	—	—	436
Issuance of common stock upon exercise of stock options	9,664	—	36	—	—	36
Stock-based compensation expense	—	—	5,209	—	—	5,209
Change in unrealized loss on investments, net of tax	—	—	—	(80)	—	(80)
Net loss	—	—	—	—	(45,761)	(45,761)
Balance as of March 31, 2024	120,021,274	$ 2	$ 780,950	$ (95)	$ (537,091)	$ 243,766

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PRIME MEDICINE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

(in thousands, except share amounts)	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Losses	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance as of December 31, 2022	97,209,213	$ 2	$ 609,849	$ (384)	$ (293,197)	$ 316,270
Issuance of common stock upon exercise of stock options	18,596	—	68	—	—	68
Stock-based compensation expense	—	—	1,681	—	—	1,681
Change in unrealized loss on investments, net of tax	—	—	—	179	—	179
Net loss	—	—	—	—	(39,397)	(39,397)
Balance as of March 31, 2023	97,227,809	2	611,598	(205)	(332,594)	278,801

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PRIME MEDICINE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(in thousands)	Three Months Ended March 31, 2024	2023
Cash flows used in operating activities:		
Net loss	$ (45,761)	$ (39,397)
Adjustments to reconcile net loss to net cash used in operating activities		
Stock-based compensation expense	5,209	1,681
Non cash lease expense	3,348	2,831
Depreciation expense	1,315	1,052
Change in fair value of short-term investment — related party	(1,166)	1,701
Amortization of premiums and discount on short-term investments	(675)	(611)
Deferred income taxes	134	(202)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(2,794)	(1,285)
Accounts payable	(5,880)	(504)
Accrued expenses and other current liabilities	(4,475)	(4,046)
Accrued settlement payment — related party	(13,500)	—
Lease liabilities	(3,462)	(2,781)
Net cash used in operating activities	(67,707)	(41,561)
Cash flows used in investing activities:		
Maturities of investments	72,500	35,000
Purchases of investments	(107,208)	(45,666)
Purchases of property and equipment	(2,324)	(1,999)
Net cash used in investing activities	(37,032)	(12,665)
Cash flows provided by financing activities:		
Proceeds from follow-on offering, net of issuance costs	132,055	—
Proceeds from issuance of pre-funded warrants, net of issuance costs	18,800	—
Proceeds from research and development funding liability	6,000	—
Proceeds from ESPP offerings	436	—
Net proceeds from stock option exercises	36	68
Net cash provided by financing activities	157,327	68
Net change in cash, cash equivalents, and restricted cash	52,588	(54,158)
Cash, cash equivalents, and restricted cash at beginning of period	55,070	201,116
Cash, cash equivalents, and restricted cash at end of period	$ 107,658	$ 146,958
Reconciliation of cash, cash equivalents and restricted cash:		
Cash, cash equivalents, and restricted cash at end of period	$ 107,658	$ 146,958
Less: restricted cash	13,496	13,496
Total cash, and cash equivalents	$ 94,162	$ 133,462

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PRIME MEDICINE, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Unaudited)

(in thousands)	Three Months Ended March 31, 2024	2023
Supplemental cash flow information:		
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 44,935	$ —
Supplemental disclosure of non-cash investing and financing activities:		
Purchases of property and equipment included in accounts payable and accrued expenses	$ 833	$ 2,603

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

PRIME MEDICINE, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

1. Nature of the Business and Basis of Presentation

Prime Medicine, Inc., together with its consolidated subsidiary (the "Company") is a biotechnology company committed to delivering a new class of differentiated one-time curative genetic therapies to address the widest spectrum of diseases. The Company is deploying Prime Editing technology, which it believe is a versatile, precise, and efficient gene editing technology. The Company was incorporated in the State of Delaware in September 2019. Its principal offices are in Cambridge, Massachusetts.

Liquidity and Capital Resources

Since its inception, the Company has devoted substantially all of its resources to building its Prime editing platform and advancing development of its portfolio of programs, establishing and protecting its intellectual property, conducting research and development activities, organizing and staffing the company, business planning, raising capital and providing general and administrative support for these operations. To date, the Company has funded its operations primarily with proceeds from sales of preferred stock and from public offerings of its common stock.

In February 2024, the Company issued and sold 22,560,001 shares of its common stock, including 3,360,000 shares pursuant to the exercise of the underwriters' option to purchase additional shares, at a price to the public of $6.25 per share. Further, in lieu of common stock to certain investors, the Company sold pre-funded warrants to purchase 3,200,005 shares of common stock at a public offering price of $6.24999 per pre-funded warrant, which represents the per share public offering price of each share of common stock less the $0.00001 per share exercise price for each pre-funded warrant. As a result of the offering, the Company received approximately $150.9 million in net proceeds, after deducting underwriting discounts, commissions and estimated offering costs of $10.1 million.

Risks and Uncertainties

The Company is subject to risks and uncertainties common to early stage companies in the biotechnology industry, including, but not limited to, completing preclinical studies and clinical trials, obtaining regulatory approval for product candidates, market acceptance of products, development by competitors of new technological innovations, dependence on key personnel, the ability to attract and retain qualified employees, reliance on third-party organizations, protection of proprietary technology, compliance with government regulations, and the ability to raise additional capital to fund operations. The Company's 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 and infrastructure, and extensive compliance-reporting capabilities. Even if the Company's development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

Since its inception, the Company has incurred substantial losses and, as of March 31, 2024, the Company had an accumulated deficit of $537.1 million. The Company expects to generate operating losses and negative operating cash flows for the foreseeable future. The Company expects that its cash, cash equivalents, and investments as of March 31, 2024 of $210.7 million will be sufficient to fund its operations for at least the next twelve months from the date of issuance of these financial statements.

The Company will need to raise additional capital to support its continuing operations and to pursue its growth strategy. Until such time as the Company can generate significant revenue from product sales, if ever, it expects to finance its operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. The Company may be unable to raise additional capital or enter into such other agreements when needed on favorable terms or at all. The inability to raise capital as and when needed would have a

negative impact on the Company's financial condition and its ability to pursue its business strategy. The Company will need to generate significant revenue to achieve profitability, and it may never do so.

Basis of Presentation

The accompanying condensed consolidated financial statements reflect the operations of the Company and its wholly-owned subsidiary. Intercompany balances and transactions have been eliminated in consolidation. The accompanying condensed consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States of America ("U.S. GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

The accompanying condensed consolidated financial statements of Prime Medicine, Inc. are unaudited. The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of March 31, 2024, the results of its operations for the three months ended March 31, 2024 and 2023, the condensed consolidated statements of stockholders' equity for the three months ended March 31, 2024 and 2023, and its cash flows for the three months ended March 31, 2024 and 2023. The financial data and other information disclosed in these notes related to the three months ended March 31, 2024 and 2023 are also unaudited. The results for the three months ended March 31, 2024 are not necessarily indicative of results to be expected for the year ending December 31, 2024, any other interim periods, or any future year or period. The condensed consolidated balance sheet data as of December 31, 2023 was derived from our audited financial statements, but does not include all disclosures required by U.S. GAAP. These interim financial statements should be read in conjunction with the audited financial statements as of and for the year ended December 31, 2023, and notes thereto, which are included in the Company's Annual Report on Form 10-K that was filed with the Securities and Exchange Commission (the "SEC") on March 1, 2024.

2. Summary of Significant Accounting Policies

The Company's significant accounting policies are disclosed in Note 2, *Summary of significant accounting policies*, in the audited consolidated financial statements for the year ended December 31, 2023, and notes thereto, included in the Company's Annual Report on Form 10-K that was filed with the SEC on March 1, 2024. Since the date of those financial statements, there have been no material changes to its significant accounting policies, except as noted below.

Use of Estimates

The preparation of the Company's condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Significant estimates and assumptions reflected within these condensed consolidated financial statements include, but are not limited to the valuation of the Company's common stock and stock-based awards, and the valuation of the related party forward contract liability. The Company bases its estimates on historical experience, known trends and other market-specific or other relevant factors that it believes to be reasonable under the circumstances. On an ongoing basis, management evaluates its estimates, as there are changes in circumstances, facts and experience. Actual results may differ materially from those estimates or assumptions.

Warrants

Management assesses warrants under ASC 480, *Distinguishing Liabilities from Equity* to determine whether they should be classified as equity or liability. If the classification is determined to be equity, proceeds received for the warrants are recorded as an increase to additional paid-in capital in the condensed consolidated balance sheets. If classified as a liability, the Company records the warrant as a liability on its consolidated balance sheet and remeasures this liability to fair value at each reporting date and recognizes changes in the fair value of the warrant

liability as a component of other expense in the condensed consolidated statements of operations and comprehensive loss.

Recently Issued Accounting Pronouncements Not Yet Adopted

Accounting standards that have been issued by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on our financial statements upon adoption.

3. Fair Value Measurements and Investments

The following tables present the Company's fair value hierarchy for its assets that are measured at fair value on a recurring basis and indicate the level of the fair value hierarchy utilized to determine such fair value:

	As of March 31, 2024:			
(in thousands)	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$ —	$ 47,915	$ —	$ 47,915
U.S. Treasury and government securities	—	35,854	—	35,854
Corporate debt securities	—	9,932	—	9,932
Short-term investments:				
U.S. Treasury and government securities	—	74,656	—	74,656
Corporate debt securities	—	35,287	—	35,287
Related party short-term investment:				
Beam equity securities	6,618	—	—	6,618
Total cash equivalents and investments	$ 6,618	$ 203,644	$ —	$ 210,262

	As of December 31, 2023:			
(in thousands)	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$ —	$ 24,209	$ —	$ 24,209
Short-term investment:				
U.S. Treasury and government securities	—	74,639	—	74,639
Related party short-term investment:				
Beam equity securities	5,452	—	—	5,452
Total cash equivalents and investments	$ 5,452	$ 98,848	$ —	$ 104,300

The Company classifies its U.S. Treasury securities as short-term based on each instrument's underlying contractual maturity date. The fair value of the Company's U.S. Treasury securities and money market funds are classified as Level 2 because they are valued using observable inputs to quoted market prices, benchmark yields, reported trades, broker/dealer quotes or alternative pricing sources with reasonable levels of price transparency and U.S. Treasury securities.

Investments in Debt Securities

Unrealized gains and losses of investments in debt securities consisted of the following:

	As of March 31, 2024:			
(in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Short-term investments in debt securities:				
U.S. Treasury and government securities	$ 74,697	$ —	$ (41)	$ 74,656
Corporate debt securities	35,329	—	(42)	35,287
Total short-term investments in debt securities	$ 110,026	$ —	$ (83)	$ 109,943

	As of December 31, 2023:			
(in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Short-term investments:				
U.S. Treasury and government securities	$ 74,654	$ 7	$ (22)	$ 74,639
Total short-term investments in debt securities	$ 74,654	$ 7	$ (22)	$ 74,639

The contractual maturities of the Company's investments in debt securities held were as follows:

(in thousands)	March 31, 2024	December 31, 2023
Due within one year	$ 109,943	$ 74,639

Marketable securities in unrealized loss positions consisted of the following:

	As of March 31, 2024:		
(in thousands, except number of securities)	Number of Securities	Fair Value	Gross Unrealized Losses
Investments in continuous loss position for less than 12 months:			
U.S. Treasury and government securities	15	$ 72,156	$ (41)
Corporate debt securities	19	$ 35,287	$ (42)

Based on factors such as historical experience, market data, issuer-specific factors, and current economic conditions, the Company did not record an allowance for credit losses as of March 31, 2024 related to these investments. Further, given the lack of significant change in the credit risk, the Company does not consider these investments to be impaired.

4. Property and Equipment, Net

Property and equipment, net consisted of the following:

(in thousands)	March 31, 2024	December 31, 2023
Property and equipment:		
Laboratory equipment	$ 24,672	$ 23,873
Leasehold improvement	579	579
Furniture and Fixture	1,042	278
Computer hardware and software	724	11
Construction in progress	5,708	5,402
Total property and equipment	32,725	30,143
Less: Accumulated depreciation	(8,799)	(7,484)
Total property and equipment, net	$ 23,926	$ 22,659

Depreciation expense related to property and equipment is as follows:

	Three Months Ended March 31,	
(in thousands)	2024	2023
Depreciation Expense	$ 1,315	$ 1,052

5. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

(in thousands)	March 31, 2024	December 31, 2023
Accrued expenses and other current liabilities		
Accrued employee compensation and benefits	$ 3,062	$ 8,270
Lab-related supplies and services	2,441	1,962
Accrued professional fees	1,138	2,273
Other	971	1,605
Total accrued expenses and other current liabilities	$ 7,612	$ 14,110

6. Leases

The Company leases office and laboratory space under various non-cancelable operating leases. The Company's significant lease agreements are disclosed in Note 9, *Leases*, in the audited consolidated financial statements for the year ended December 31, 2023, and notes thereto, included in the Company's Annual Report on Form 10-K that was filed with the SEC on March 1, 2024. Since the date of those financial statements, there have been no changes to the Company's significant agreements except as described below.

60 First Street, Cambridge, Massachusetts Lease

In November 2021, the Company entered into a lease for three floors of office and laboratory space in Cambridge, Massachusetts, with rent commencing in March 2024, subject to any credits pursuant to the terms of the lease. Also subject to any credits pursuant to the terms of the lease, the Company expects to pay up to approximately $208.7 million over the initial non-cancelable term of the lease of ten years, and the Company has an option to extend the lease for an additional period of ten years with the rent during the extension term being the then fair market rent. The Company secured the lease with a $13.1 million security deposit, which was recorded as restricted cash on the condensed consolidated balance sheets as of March 31, 2024 and December 31, 2023.

Accounting Considerations

The Company determined that the lease contained three separate lease components each of which represents a right of use that the Company can benefit from on its own and none which are neither highly dependent nor highly related to each other. The Company allocated the consideration among the three lease components based on their relative fair market value.

In accordance with ASC 842, Leases, the lease commenced for one of the lease components in March 2024 and the Company recorded a right-of-use asset of $44.9 million, and a corresponding lease liability of $33.6 million on the lease commencement date; this includes a reclass of $11.3 million from prepaid expenses to right-of-use asset related to build out costs which were determined to be owned by the lessor. As the exercise of the option to extend the lease term was not reasonably certain, the Company will recognize lease expense for this lease component through February 2034.

The lease commencement for the other two lease components is expected to occur in 2025. Any consideration paid to lease components for which the lease has not commenced are recorded as prepaid expense on the condensed consolidated balance sheets.

The table below reconciles the undiscounted future annual lease payments to the total operating lease liabilities recorded in the condensed consolidated balance sheet as of March 31, 2024:

(in thousands)	Undiscounted Amounts
Undiscounted lease payments:	
Remaining in 2024	$ 5,868
2025	18,584
2026	21,339
2027	20,812
2028	20,853
Thereafter	118,079
Total undiscounted lease payments	205,535
Less: payments related to leases not commenced	(129,866)
Less: imputed interest	(31,876)
Total operating lease liability	$ 43,793

7. Stockholder's Equity

Common Stock

Under the Company's Third Amended and Restated of Certificate of Incorporation, the Company's common stock had a par value of $0.0001 and each share of common stock entitles the holder to one vote on all matters submitted to the stockholders for a vote. The holders of common stock are entitled to receive dividends, if any, as declared by the Company's Board of Directors (the "Board of Directors").

As previously discussed, in February 2024, the Company issued and sold 22,560,001 shares of its common stock, including 3,360,000 shares pursuant to the exercise of the underwriters' option to purchase additional shares, at a price to the public of $6.25 per share.

Pre-funded Warrants

As discussed in Note 1, *Nature of the Business and Basis of Presentation*, in February 2024, the Company sold pre-funded warrants to purchase 3,200,005 shares of common stock at a public offering price of $6.24999 per pre-funded warrant, which represents the per share public offering price of each share of common stock less the $0.00001 per share exercise price for each pre-funded warrant. Subject to certain requirements, the pre-funded

warrants can be exercised by the holder at anytime. As of March 31, 2024, there have not been any exercises of the pre-funded warrants.

The pre-funded warrants meet the definition of an equity instrument under ASC 815-40, *Derivatives and Hedging — Contracts in Entity's Own Equity*, and funds received were recorded as an increase in additional paid-in capital in the condensed consolidated balance sheets. Funds received upon exercise of warrants will be recorded as common stock in the condensed consolidated balance sheets as the exercise price represents the par value of the underlying common stock.

At-The-Market Equity Program

In November 2023, the Company entered into Open Market Sale Agreement℠ (the "Sales Agreement") with Jefferies LLC, acting as the Company's agent and/or principal (the "Sales Agent"), with respect to an "at the market offering" program under which the Company may, from time to time, at its sole discretion, issue and sell shares of its common stock having an aggregate offering price of up to $300.0 million through the Sales Agent. As of March 31, 2024, there have been no sales of common stock pursuant to the Sales Agreement.

8. Stock-Based Compensation

2019 Equity Incentive Plan

The Company's 2019 Stock Option and Grant Plan (the "2019 Plan") provides for the Company to grant incentive stock options ("ISO"), non-qualified stock options, unrestricted stock awards, restricted stock awards ("RSA") and other stock-based awards (collectively, the "Awards") to the officers, employees, consultants and other key persons of the Company. The 2019 Plan was administered by the Board of Directors, or at the discretion of the Board of Directors, by a committee of the Board of Directors. The exercise prices, vesting and other restrictions are determined at the discretion of the Board of Directors, or its committee if so delegated.

In October 2022, in connection with the closing of the Company's initial public offering ("IPO"), the Board of Directors determined that no further awards would be granted under the 2019 Plan.

2022 Stock Option and Incentive Plan

On February 9, 2022, the Board of Directors adopted, and on October 10, 2022, the Company's stockholders approved, the 2022 Stock Option and Incentive Plan (the "2022 Plan"), which became effective on October 18, 2022. The 2022 Plan allows the Company to make equity-based and cash-based incentive awards to its officers, employees, directors, and consultants. The 2022 Plan provides for the grant of incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock awards, restricted stock units and other stock-based awards.

The shares of common stock underlying any awards under the 2022 Plan and the 2019 Plan that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by the Company prior to vesting, satisfied without the issuance of stock, expire, or are otherwise terminated (other than by exercise) will be added back to the shares of common stock available for issuance under the 2022 Plan. The number of shares reserved and available for issuance under the 2022 Plan increased on January 1, 2023 and will increase on each January 1 hereafter, by five percent of the outstanding number of shares of common stock on the immediately preceding December 31 or such lesser number of shares as determined by the Compensation Committee. On January 1, 2023, the annual increase resulted in an additional 4,868,856 shares authorized being added to the 2022 Plan. As of March 31, 2024, the Company had 21,290,494 shares reserved under the 2022 Plan and the 2019 Plan, and 9,088,040 shares available for issuance under the 2022 ESPP.

2022 Employee Stock Purchase Plan

On February 9, 2022, the Board of Directors adopted, and on October 10, 2022, the Company's stockholders approved, the 2022 Employee Stock Purchase Plan (the "2022 ESPP"), which became effective on October 18, 2022.

The number of shares of common stock that may be issued under the 2022 ESPP cumulatively increased beginning on January 1, 2023 and shall increase on each January 1 hereafter through January 1, 2032, by the least of (i) 971,350 shares of common stock, (ii) one percent of the outstanding number of shares of common stock on the immediately preceding December 31, or (iii) such number of shares of common stock as determined by the administrator of the 2022 ESPP. There was no annual increase for the 2022 ESPP on January 1, 2024. As of March 31, 2024, the Company had 1,868,212 shares available for issuance under the 2022 Plan.

During the three months ended March 31, 2024, the Company issued 74,488 shares of the Company's common stock under the 2022 ESPP.

Stock Options

The following table summarizes the Company's stock option activity for the three months ended March 31, 2024:

	Number of Shares	Weighted-Average Exercise Price
Outstanding at December 31, 2023	7,641,863	$ 9.79
Granted	3,898,410	8.23
Exercised	(9,664)	3.73
Cancelled or forfeited	(139,885)	11.59
Outstanding at March 31, 2024	11,390,724	$ 9.24
Options vested and exercisable at March 31, 2024	2,838,246	$ 7.64
Options vested and expected to vest at March 31, 2024	11,390,724	$ 9.24

As of March 31, 2024, there was $57.5 million of total unrecognized compensation cost related to time-based unvested stock options the Company expects to recognize such amount over a remaining weighted-average period of 2.8 years.

Performance-Based Stock Options

The following table summarizes the Company's performance-based stock option activity for the three months ended March 31, 2024:

	Number of Shares	Weighted-Average Grant Date Fair Value
Outstanding at December 31, 2023	411,730	$ 6.65
Granted	400,000	8.32
Exercised	—	—
Cancelled or forfeited	—	—
Outstanding at March 31, 2024	811,730	$ 7.47
Vested and exercisable at March 31, 2024	131,882	$ 5.34

As of March 31, 2024, there was $4.7 million of total unrecognized compensation cost related to performance-based stock options.

Restricted Common Stock Awards

The Company awarded restricted common stock to employees and non-employees under its 2019 Plan. The vesting of these restricted stock awards are time-based or performance-based.

Time-Based Restricted Common Stock

The following table summarizes the Company's time-based restricted common stock activity for the three months ended March 31, 2024:

	Number of Shares	Weighted-Average Grant-Date Fair Value
Outstanding at December 31, 2023	903,227	$ 0.17
Issued	—	—
Vested	(329,833)	0.14
Repurchased	—	—
Outstanding at March 31, 2024	573,394	$ 0.19

As of March 31, 2024, there was $0.1 million of total unrecognized compensation cost related to unvested time-based restricted common stock which the Company expects to recognize over a weighted-average period of 0.5 years.

Performance-Based Restricted Common Stock

The following table summarizes the Company's performance-based restricted common stock activity for the three months ended March 31, 2024:

	Number of Shares	Weighted-Average Grant-Date Fair Value
Outstanding at December 31, 2023	3,832,769	$ 0.07
Issued	—	—
Vested	—	—
Repurchased	—	—
Outstanding at March 31, 2024	3,832,769	$ 0.07

As of March 31, 2024, there was $0.3 million of total unrecognized compensation cost related to unvested performance-based restricted common stock.

Stock-Based Compensation

The following table below summarizes the classification of the Company's stock-based compensation expense related to stock options and restricted common stock awards in the condensed consolidated statements of operations and comprehensive loss:

	Three Months Ended March 31,	
(in thousands)	2024	2023
Stock-based compensation expense:		
Research and development	$ 2,725	$ 1,170
General and administrative	2,484	511
Total stock-based compensation expense	$ 5,209	$ 1,681

9. Significant Agreements

The Company's significant agreements are disclosed in Note 11, *License and Collaboration Agreements*, in the audited consolidated financial statements for the year ended December 31, 2023, and notes thereto, included in the

Company's Annual Report on Form 10-K that was filed with the SEC on March 1, 2024. Since the date of those financial statements, there have been no changes to the Company's significant agreements.

10. Net Loss per Share

Basic and diluted net loss per common share attributable to common stockholders was calculated as follows:

(in thousands, except share and per share amounts)	Three Months Ended March 31, 2024	Three Months Ended March 31, 2023
Numerator:		
Net loss attributable to common stockholders	$ (45,761)	$ (39,397)
Denominator:		
Weighted-average common shares outstanding, basic and diluted	104,466,178	89,064,895
Net loss per share attributable to common stockholders, basic and diluted	$ (0.44)	$ (0.44)

Diluted net loss per share available to common stockholders was computed by giving effect to all potentially dilutive common stock equivalents outstanding for the period. For purposes of this calculation, preferred stock, unvested restricted stock and stock options to purchase common stock were considered common stock equivalents but had been excluded from the calculation of diluted net loss per share available to common stockholders as their effect was anti-dilutive. In periods in which the Company reports a net loss available to common stockholders, diluted net loss per share available to common stockholders is the same as basic net loss per share available to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

The following common stock equivalents were excluded from the calculation of diluted net loss per share applicable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	As of March 31, 2024	As of March 31, 2023
Anti-dilutive common stock equivalents:		
Options to purchase common stock	11,522,606	6,945,214
Unvested restricted common stock	4,406,163	7,530,495
Total anti-dilutive common stock equivalents:	15,928,769	14,475,709

11. Related Party Transactions

Consulting Agreement with David Liu

Pursuant to a consulting agreement with David Liu, for the three months ended March 31, 2024 and 2023, the Company made payments of $37,500 in each period for scientific consulting and other expenses. As of March 31, 2024 and December 31, 2023, there were no amounts included within accounts payable or accrued expenses.

Myeloid Therapeutics

In December 2021, the Company and Myeloid entered into the Myeloid Collaboration Agreement and Myeloid Subscription Agreement during which time the Company and Myeloid had one common board member, who is also an affiliate of Newpath, one of the Company's holders of common stock. In 2023, the Company terminated the Myeloid Collaboration Agreement.

In January 2024, the Company and Myeloid entered into a settlement agreement resolving two arbitration proceedings, which are described in Note 10, Licenses and Collaboration Agreements. Under the terms of the settlement agreement, the parties agreed to resolve and settle all disputes between the parties and release all claims between them relating to the License Agreement and the arbitrations in exchange for the Company's payment to Myeloid of $13.5 million, certain mutual covenants, and other consideration. The settlement was accrued on the

Company’s consolidated balance sheet as of December 31, 2023 and paid during the three months ended March 31, 2024. As of March 31, 2024, there were no amounts included within accounts payable or accrued expenses.

Advisory Services Agreement with Jeffrey Marrazzo

In February 2024, the Company entered into an advisory services agreement (“Marrazzo Agreement”) with Jeffrey Marrazzo, a member of the Board of Directors. Under the Marrazzo Agreement, Mr. Marrazzo agreed to provide certain professional services to the Company separate from and in addition to his service as a Board member. For his services, the Company agreed to pay Mr. Marrazzo an annual fee of $50,000 per year in addition to the grant of an option to purchase 250,000 shares of the Company's common stock, which has a grant date fair value of $1.5 million.

The term of the Marrazzo Agreement runs through February 2025 and may be terminated or extended by mutual written agreement. If the Company terminates the Marrazzo Agreement without "Cause," the administrator of the 2022 Plan will accelerate the vesting of the option such that the pro rata portion of the option will vest and be immediately exercisable.

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 condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q and our audited consolidated financial statements and notes and Management's Discussion and Analysis of Financial Condition and Results of Operations, included in our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 1, 2024. As discussed in the section titled "Special Note Regarding Forward-Looking Statements," the following discussion and analysis contains forward-looking statements that involve risks and uncertainties, such as statements regarding our plans, objectives, expectations, intentions, or projections, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2023. Our historical results are not necessarily indicative of the results that may be expected for any period in the future.

Overview

We are a biotechnology company committed to delivering a new class of differentiated one-time curative genetic therapies to address the widest spectrum of diseases. We are deploying Prime Editing technology, which we believe is a versatile, precise, and efficient gene editing technology.

To maximize the potential of our Prime Editing technology, we have built a diversified portfolio of investigational therapeutic programs organized around core areas of focus: hematology and immunology, liver, lung, ocular, and neuromuscular. We are advancing additional programs as potential partnership opportunities.

Chronic granulomatous disease is our most advanced blood program, and we have designated PM359 as our development candidate. In April 2024, we announced that the U.S. Food and Drug Administration cleared our investigational new drug application for PM359 for the treatment of chronic granulomatous disease, enabling us to initiate our global Phase 1/2 clinical trial in the United States. The Phase 1/2 clinical trial is a multinational, first-in-human trial designed to assess the safety, biological activity and preliminary efficacy of PM359 in adult and pediatric study participants.

We believe our Prime Editing programs are well-positioned to leverage the clinical, regulatory, and manufacturing advancements made to date across gene therapy, gene editing, and delivery modalities to accelerate progression to clinical trials and potential approval.

Components of Our Results of Operations

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred in connection with the development and research of our immediate target indications and our differentiation target indications. These expenses include:

- personnel-related expenses, including salaries, bonuses, benefits and stock-based compensation for employees engaged in manufacturing, research and development functions;
- expenses incurred in connection with continuing our current research programs and preclinical development of any product candidates we may identify, including under agreements with third parties, such as consultants and contractors;
- the cost of developing and validating our manufacturing process for use in our preclinical studies and future clinical trials;
- laboratory supplies and research materials;

- facilities, depreciation and other expenses related to research and development activities, which include direct or allocated expenses for rent and maintenance of facilities, and utilities;
- the cost allocated to acquire in-process research and development, with no alternative future use associated with asset acquisitions or transactions to license intellectual property, such as our Broad License Agreement; and
- expenses incurred in connection with our Pledge to Broad Institute;

We expense all research and development costs in the periods in which they are incurred. Most of our research and development expenses have been related to early stage development activities. In the future, external research and development costs for any individual product candidate will be tracked commencing upon product candidate nomination. We do not allocate employee costs, costs associated with our discovery efforts, laboratory supplies, and facilities expenses, including depreciation or other indirect costs, to specific product development programs because these costs are deployed across multiple programs and our platform and, as such, are not separately classified.

Upfront and milestone payments made are accrued for and expensed when the achievement of the milestone is probable up to the point of regulatory approval. Milestone payments made upon regulatory approval will be capitalized and amortized over the remaining useful life of the related product.

We expect our research and development expenses to continue to increase substantially for the foreseeable future with our planned research and development activities related to developing any future product candidates, including investments in manufacturing, as we advance any product candidates we may identify and begin to conduct clinical trials.

General and Administrative Expenses

General and administrative expenses consist of salaries and personnel-related costs, including stock-based compensation, for our personnel in executive, legal, finance and accounting, human resources and other administrative functions. General and administrative expenses also include legal fees relating to patents and corporate matters; professional fees paid for accounting, auditing, consulting and tax service; insurance costs; office and information technology costs; and facilities, depreciation and other general and administrative expenses, which include direct or allocated expenses for rent and maintenance of facilities and utilities.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support research and development activities; increased accounting, legal, insurance, and investor and public relations costs as we continue to operate as a public company; and additional intellectual property-related expenses as we file patent applications to protect innovations arising from our research and development activities.

Other Income (Expense)

Other income (expense), net primarily consists of interest and other income earned on our short-term investments and the change in the fair value of our short-term investment in Beam Therapeutics Inc. (“Beam”), a related party, in connection with the Beam Collaboration Agreement, which is discussed in greater detail in Note 11, *License and Collaboration Agreements*, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023.

Results of Operations — Comparison of the Three Months Ended March 31, 2024 and 2023

Operating Expenses

Research and Development Expenses

(in thousands)	Three Months Ended March 31, 2024	2023	Change
Research and development expenses:			
Personnel expenses	$ 15,007	$ 11,194	$ 3,813
Lab supplies	11,619	10,864	755
Facility related and other	7,334	5,304	2,030
License, intellectual property fees, and other	1,675	1,875	(200)
Professional and consultant fees	1,592	1,643	(51)
Clinical expense	547	—	547
Total research and development expenses	$ 37,774	$ 30,880	$ 6,894

The $6.9 million increase in research and development expense for the three months ended March 31, 2024 as compared to the three months ended March 31, 2023 was primarily driven by:

- $3.8 million increase in personnel expense, including an increase in stock-based compensation expense of $1.6 million, driven by our increased headcount as we continue to build out our research and development function; and
- $2.0 million increase in facility-related expense primarily due to the expansion and build out of our laboratory space.

General and Administrative Expenses

(in thousands)	Three Months Ended March 31, 2024	2023	Change
General and administrative expenses:			
Personnel expenses	$ 5,884	$ 3,065	$ 2,819
Professional and consultant fees	3,110	3,969	(859)
Facility related and other	2,164	2,119	45
Total general and administrative expenses	$ 11,158	$ 9,153	$ 2,005

The $2.0 million increase in general and administrative expense for the three months ended March 31, 2024 as compared to the three months ended March 31, 2023 is primarily driven by $2.8 million increase in personnel expense, including an increase in stock-based compensation expense of $2.0 million, driven by growth in personnel as we operate as a public company and to support our growing research and development function.

Other Income (Expense)

(in thousands)	Three Months Ended March 31, 2024	2023	Change
Other income:			
Change in fair value of short-term investment — related party	$ 1,166	$ (1,701)	$ 2,867
Other income, net	1,548	2,135	(587)
Total other income, net	$ 2,714	$ 434	$ 2,280

Change in Fair Value of Related Party Short-Term Investment

The change in fair value of related party short-term investment for each of the periods presented is a result of Beam's stock price movement.

Other Income, Net

Other income, net for the three months ended March 31, 2024 primarily consists of interest income from the Company's short-term investments.

Liquidity and Capital Resources

Since our inception, we have incurred significant operating losses. We expect to incur significant expenses and operating losses for the foreseeable future as we commence the clinical development of our programs and continue our platform development and early-stage research activities. We have not yet commercialized any products and we do not expect to generate revenue from sales of products for several years, if at all. To date, we have funded our operations primarily with proceeds from sales of preferred stock and from our public offerings. As of March 31, 2024, we had cash, cash equivalents, and investments of $210.7 million, excluding our restricted cash, or $224.2 million, including restricted cash.

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented:

(in thousands)	Three Months Ended March 31, 2024	2023
Net change in cash, cash equivalents and restricted cash:		
Net cash used in operating activities	$ (67,707)	$ (41,561)
Net cash used in investing activities	(37,032)	(12,665)
Net cash provided by financing activities	157,327	68
Net change in cash, cash equivalents, and restricted cash	$ 52,588	$ (54,158)

Operating Activities

Net cash used in operating activities for the three months ended March 31, 2024 was driven primarily by the following uses of cash:

- $45.8 million net loss;
- $13.5 million change in accrued settlement payment — related party;
- $5.9 million change in accounts payable;
- $4.5 million change in accrued expenses and other current liabilities; and

- $3.5 million change in lease liabilities; and
- $2.8 million change in prepaid and other current assets.

These were offset by $8.2 million of non-cash amounts included in net loss, which primarily consisted of stock-based compensation expense, non-cash lease expense, depreciation and amortization expense, and change in fair value of short-term investment — related party.

Net cash used in operating activities for the three months ended March 31, 2023 was driven primarily by the following uses of cash:

- $39.4 million net loss;
- $4.0 million change in accrued expenses and other current liabilities;
- $2.8 million change in lease liabilities; and
- $1.3 million change in prepaid and other current assets.

These were offset by $6.5 million of non-cash amounts included in net loss, which primarily consisted of change in fair value of short-term investment — related party, non-cash lease expense, and stock-based compensation expense.

Investing Activities

Net cash used in investing activities for the three months ended March 31, 2024 was driven primarily by the following uses of cash:

- $34.7 million of purchases of marketable securities, net of maturities; offset by
- $2.3 million of purchases of property and equipment.

Net cash used in investing activities for the three months ended March 31, 2023 was driven primarily by the following:

- $10.7 million of purchases of marketable securities, net of maturities; and
- $2.0 million of purchases of property and equipment.

Financing Activities

Net cash provided by financing activities for the three months ended March 31, 2024 was driven primarily by the following:

- $132.1 million of Proceeds from issuances of common stock in the our February 2024 public offering;
- $18.8 million of proceeds from issuance of pre-funded warrants contemporaneous with our February 2024 public offering; and
- $6.0 million of proceeds received under our agreement with Cystic Fibrosis Foundation.

Funding Requirements

To date, we have not generated any revenue from product sales. We do not expect to generate revenue from product sales unless and until we successfully complete preclinical and clinical development of, receive regulatory approval for, and commercialize a product candidate and we do not know when, or if at all, that will occur. We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities and studies and initiate clinical trials. In addition, if we obtain regulatory approval for any product candidates, we expect to incur significant expenses related to product sales, marketing, and distribution to the extent that such sales, marketing and distribution are not the responsibility of potential collaborators. Further, we

have incurred, and expect to continue to incur, costs associated with operating as a public company. The timing and amount of our operating expenditures will depend largely on the factors set out above. For more information, refer to the section titled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023, and the "Risk Factors" section of subsequent Quarterly Reports on Form 10-Q.

We believe our existing cash, cash equivalents, and investments will be sufficient to fund our operating expenses and capital expenditure requirements into the third quarter of 2025. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. We expect that we will require additional funding to:

- continue our current research development activities;
- identify product candidates;
- initiate preclinical testing and clinical trials for our future product candidates we identify;
- develop, maintain, expand and protect our intellectual property portfolio;
- further develop our Prime Editing platform; and
- hire additional research, clinical and scientific personnel.

If we receive regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution, depending on where we choose to commercialize ourselves.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of private and public equity offerings, debt financings, additional collaborations, strategic alliances, and marketing, distribution or licensing arrangements with third parties. To the extent that we raise additional capital through the sale of equity or convertible debt securities, ownership interest may be materially diluted, and the terms of such securities could include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include restrictive covenants that limit our ability to take specified actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise funds through collaborations, strategic alliances or marketing, or distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, any 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, reduce or eliminate our 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.

Contractual Obligations and Other Commitments

We enter into contracts in the normal course of business with contract organizations and other vendors to assist in the performance of our research and development activities, and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancellable contracts and not included in the table of contractual obligations and commitments.

During the three months ended March 31, 2024, except for the minimum lease commitments disclosed in Note 7, *Leases*, to the unaudited condensed consolidated financial statements in this Quarterly Report on Form 10-Q, there were no significant changes to our contractual obligations and commitments described under Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2023.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosures of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses incurred during the reporting periods. We base our estimates on historical experience, known trends and events, and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities recorded revenues and expenses that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Actual results may differ from these estimates.

During the three months ended March 31, 2024, there were no material changes to our critical accounting policies and significant judgements described under Management's Discussion and Analysis of Critical Accounting Policies and Significant Judgments and Estimates which are included in our Annual Report on Form 10-K for the year ended December 31, 2023.

Recently Issued and Adopted Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2, *Summary of Significant Accounting Policies*, to our audited financial statements for the year ended December 31, 2023, and notes thereto, included in the Company's Annual Report on Form 10-K.

Emerging Growth Company Status

The Jumpstart Our Business Startups Act of 2012 permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected not to "opt out" of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we will adopt the new or revised standard at the time private companies adopt the new or revised standard and will do so until such time that we either (i) irrevocably elect to "opt out" of such extended transition period or (ii) no longer qualify as an emerging growth company. As a result of this election, our condensed consolidated financial statements may not be comparable to other public companies that comply with new or revised accounting pronouncements as of public company effective dates. We may choose to early adopt any new or revised accounting standards whenever such early adoption is permitted for private companies.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

We are exposed to market risk related to changes in interest rates of our investment portfolio of cash equivalents and investments. As of March 31, 2024, we held cash, cash equivalents, investments, and restricted cash of $224.2 million, which consisted of cash, money market funds, equity securities, and U.S. Treasuries. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. The fair value of our cash equivalents, consisted of our money market funds, and U.S. Treasuries are subject to change as a result of potential changes in market interest rates. Due to the short-term maturities of our cash equivalents and U.S. Treasuries and the low risk profile of our investments, an immediate 10 percent change in interest rates would not have a material effect on the fair market value of our cash equivalents or U.S. Treasuries.

Effects of Inflation

Inflation generally affects us by increasing our cost of labor and research and development costs. Although we do not believe that inflation has had a material impact on our financial position or results of operations to date, we may

experience some effect in the near future (especially if inflation rates continue to rise) due to an impact on the costs to conduct research and development, labor costs we incur to attract and retain qualified personnel, and other operational costs. Inflationary costs could adversely affect our business, financial condition and results of operations.

Item 4. Controls and Procedures

We have established disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) designed to ensure that information required to be disclosed in the reports that 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 is accumulated and communicated to management, including the principal executive officer (our Chief Executive Officer) and principal financial officer (our Chief Financial Officer), to allow timely decisions regarding required disclosure. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Internal Control over Financial Reporting

Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated, as of the end of the period covered by this Quarterly Report on Form 10-Q, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures have been designed to provide reasonable assurance of achieving their objectives.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, that occurred during the fiscal quarter ended March 31, 2024 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 become involved in litigation or other legal proceedings. While the outcome of any such proceedings cannot be predicted with certainty, as of March 31, 2024 we were not a party to any litigation or legal proceedings that, in the opinion of our management, are probable to have a material adverse effect on our business.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. For a detailed discussion of the risks and uncertainties related to our business, please refer to the section titled "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023. There have been no material changes from the risk factors set forth in our Quarterly Report on Form 10-K for the year ended December 31, 2023.

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

Set forth below is information regarding shares of equity securities sold, and options granted, by us during the three months ended March 31, 2024 that were not registered under the Securities Act.

Recent Sales of Unregistered Equity Securities

None.

Use of Proceeds From Registered Securities

In November 2023, we entered into an Open Market Sale Agreement[SM] (the "Sales Agreement") with Jefferies LLC ("Jefferies") under which we may, from time to time, issue and sell shares of our common stock having aggregate sales proceeds of up to $300.0 million, in a series of one or more at-the-market equity offerings (the "2023 ATM Program"). Jefferies is not required to sell any specific share amounts but acts as our sales agent, using commercially reasonable efforts consistent with its normal trading and sales practices. We will pay Jefferies a commission equal to 3.0% of the aggregate gross proceeds we receive from each sale of our shares of common stock. Pursuant to the Sales Agreement, any shares will be sold pursuant to our shelf registration statement on Form S-3 (File No. 333-275321) filed with the SEC on November 3, 2023, including the base prospectus contained therein, as declared effective by the SEC on November 13, 2023. Our common stock will be sold at prevailing market prices at the time of the sale, and as a result, prices may vary. As of March 31, 2024, we have not sold any shares of common stock under the 2023 ATM program.

In February 2024, we issued and sold 22,560,001 shares of our common stock, including 3,360,000 shares pursuant to the exercise of the underwriters' option to purchase additional shares, at a price to the public of $6.25 per share. Further, in lieu of common stock to certain investors, we sold pre-funded warrants to purchase 3,200,005 shares of common stock at a public offering price of $6.24999 per pre-funded warrant, which represents the per share public offering price of each share of common stock less the $0.00001 per share exercise price for each pre-funded warrant. As a result of the offering, we received approximately $150.9 million in net proceeds, after deducting underwriting discounts, commissions and estimated offering costs of $10.1 million.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not Applicable.

Item 5. Other Information

None.

Item 6. Exhibits

(a) Exhibits.

Exhibit number	Exhibit table
3.1	Third Amended and Restated Certificate of Incorporation of Prime Medicine, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on October 24, 2022).
3.2	Amended and Restated Bylaws of Prime Medicine, Inc. (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K, filed with the SEC on October 24, 2022).
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.
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.
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.
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.
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

** The certifications furnished in Exhibit 32.1 and Exhibit 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended. Such certifications will not be deemed to be incorporated by reference into any filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.

(b) Financial Statement Schedules.

None.

Signatures

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

Prime Medicine, Inc.

Date: May 10, 2024

By: /s/ Keith Gottesdiener

Keith Gottesdiener

President and Chief Executive Officer
(Principal Executive Officer)

Date: May 10, 2024

By: /s/ Allan Reine

Allan Reine

Chief Financial Officer
(Principal Financial 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, Keith Gottesdiener, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Prime Medicine, Inc.;

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(s) 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(s) 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):

   (e) 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

   (f) 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 10, 2024

By: /s/ Keith Gottesdiener

Keith Gottesdiener
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, Allan Reine, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Prime Medicine, Inc.;

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(s) 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(s) 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):

    (e) 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

    (f) 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 10, 2024

By: /s/ Allan Reine

Allan Reine
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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

In connection with this Quarterly Report of Prime Medicine, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) 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 10, 2024

By: /s/ Keith Gottesdiener

Keith Gottesdiener
Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

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

In connection with this Quarterly Report of Prime Medicine, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) 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 10, 2024

By: /s/ Allan Reine

Allan Reine
Chief Financial Officer
(Principal Financial Officer)