
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

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

For the Quarterly Period Ended March 31, 2023

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 001-35963

NEUBASE THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

46-5622433

(I.R.S. Employer Identification No.)

350 Technology Drive, Pittsburgh, PA 15219

(Address of principal executive offices and zip code)

(412) 763-3350

(Registrant's telephone number, including area code)

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, \$0.0001 par value per share	NBSE	The Nasdaq Stock Market LLC

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, a 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 Act). Yes No

As of May 8, 2023, 33,810,356 shares of the common stock, par value \$0.0001, of the registrant were outstanding.

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Introductory Note

On April 21, 2023, the Company's Board of Directors approved a change in the Company's fiscal year end from September 30 to December 31, effective for the fiscal year beginning January 1, 2023 and ending December 31, 2023. As a result of the change in year end, the Company will file a Transition Report on Form 10-QT for the period from October 1, 2022 through December 31, 2022. The Company's 2023 fiscal year will run from January 1, 2023 through December 31, 2023.

PART I.

ITEM 1. FINANCIAL STATEMENTS

**NeuBase Therapeutics, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(Unaudited)**

	March 31, 2023	December 31, 2022
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 13,845,045	\$ 17,386,326
Prepaid insurance	45,444	188,266
Other prepaid expenses and current assets	323,102	391,655
Total current assets	<u>14,213,591</u>	<u>17,966,247</u>
EQUIPMENT, net	<u>1,697,994</u>	<u>1,934,100</u>
OTHER ASSETS		
Right-of-use asset, operating lease asset	5,296,545	5,409,574
Security deposit	250,783	273,215
Total other assets	<u>5,547,328</u>	<u>5,682,789</u>
TOTAL ASSETS	<u><u>\$ 21,458,913</u></u>	<u><u>\$ 25,583,136</u></u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 590,189	\$ 369,505
Accrued expenses and other current liabilities	800,565	1,227,656
Operating lease liabilities	479,493	469,118
Finance lease liabilities	49,816	78,987
Total current liabilities	<u>1,920,063</u>	<u>2,145,266</u>
Long-term operating lease liability	<u>5,090,757</u>	<u>5,214,074</u>
TOTAL LIABILITIES	<u><u>7,010,820</u></u>	<u><u>7,359,340</u></u>
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY		
Preferred stock, \$0.0001 par value; 10,000,000 shares authorized; no shares issued and outstanding as of March 31, 2023 and December 31, 2022	—	—
Common stock, \$0.0001 par value; 250,000,000 shares authorized; 33,810,356 and 33,155,356 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively	3,381	3,315
Additional paid-in capital	125,651,217	125,333,873
Accumulated deficit	<u>(111,206,505)</u>	<u>(107,113,392)</u>
TOTAL STOCKHOLDERS' EQUITY	<u><u>14,448,093</u></u>	<u><u>18,223,796</u></u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u><u>\$ 21,458,913</u></u>	<u><u>\$ 25,583,136</u></u>

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

NeuBase Therapeutics, Inc. and Subsidiaries
Condensed Consolidated Statements of Operations
(Unaudited)

	<u>Three Months Ended March 31,</u>	
	<u>2023</u>	<u>2022</u>
OPERATING EXPENSES		
General and administrative	\$ 2,917,315	\$ 3,093,713
Research and development	1,240,246	6,835,670
Restructuring	6,727	—
TOTAL OPERATING EXPENSES	<u>4,164,288</u>	<u>9,929,383</u>
LOSS FROM OPERATIONS	(4,164,288)	(9,929,383)
OTHER INCOME (EXPENSE)		
Interest expense	(2,354)	(3,316)
Interest income	178,377	3,445
Other income (expense), net	(104,848)	5,225
Total other income (expense), net	<u>71,175</u>	<u>5,354</u>
NET LOSS	<u>\$ (4,093,113)</u>	<u>\$ (9,924,029)</u>
BASIC AND DILUTED LOSS PER SHARE	<u>\$ (0.12)</u>	<u>\$ (0.30)</u>
WEIGHTED AVERAGE SHARES OUTSTANDING:		
BASIC AND DILUTED	<u>33,548,356</u>	<u>32,683,263</u>

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

NeuBase Therapeutics, Inc. and Subsidiaries
Condensed Consolidated Statements of Changes in Stockholders' Equity
For the Three Months Ended March 31, 2023 and 2022

(Unaudited)

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance as of December 31, 2022	33,155,356	\$ 3,315	\$ 125,333,873	\$ (107,113,392)	\$ 18,223,796
Stock-based compensation expense	—	—	316,689	—	316,689
Exercise of stock options	655,000	66	655	—	721
Net loss	—	—	—	(4,093,113)	(4,093,113)
Balance as of March 31, 2023	<u>33,810,356</u>	<u>\$ 3,381</u>	<u>\$ 125,651,217</u>	<u>\$ (111,206,505)</u>	<u>\$ 14,448,093</u>

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance as of December 31, 2021	32,768,184	\$ 3,276	\$ 123,827,646	\$ (76,696,719)	\$ 47,134,203
Stock-based compensation expense	—	—	952,828	—	952,828
Issuance of restricted stock for services	(509,527)	(51)	51	—	—
Net loss	—	—	—	(9,924,029)	(9,924,029)
Balance as of March 31, 2022	<u>32,258,657</u>	<u>\$ 3,225</u>	<u>\$ 124,780,525</u>	<u>\$ (86,620,748)</u>	<u>\$ 38,163,002</u>

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

NeuBase Therapeutics, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
Cash flows from operating activities		
Net loss	\$ (4,093,113)	\$ (9,924,029)
Adjustments to reconcile net loss to net cash used in operating activities		
Stock-based compensation	316,689	952,828
Depreciation and amortization	187,444	190,917
Loss on disposal of fixed assets	53,609	(7,595)
Amortization of right-of-use assets	113,029	122,353
Changes in operating assets and liabilities		
Prepaid insurance, other prepaid expenses and current assets	211,375	(103,760)
Security deposit	22,432	(19,600)
Accounts payable	244,012	427,530
Accrued expenses and other current liabilities	(390,446)	289,507
Operating lease liability	(112,942)	(120,564)
Net cash used in operating activities	(3,447,911)	(8,192,413)
Cash flows from investing activities		
Purchase of laboratory and office equipment	(13,447)	(148,411)
Proceeds received on sale of equipment	8,500	—
Net cash used in investing activities	(4,947)	(148,411)
Cash flows from financing activities		
Principal payment of finance lease liability	(29,171)	(27,120)
Payment of issuance costs for equity commitment	(59,973)	—
Proceeds from exercise of stock options	721	—
Net cash used in financing activities	(88,423)	(27,120)
Net decrease in cash and cash equivalents	(3,541,281)	(8,367,944)
Cash and cash equivalents, beginning of period	17,386,326	47,326,060
Cash and cash equivalents, end of period	\$ 13,845,045	\$ 38,958,116
Supplemental disclosure of cash flow information:		
Non-cash investing and financing activities:		
Purchases of laboratory and office equipment in accounts payable	\$ 13,447	\$ —
Right-of-use asset obtained in exchange for operating lease liabilities	\$ —	\$ 164,613

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

NeuBase Therapeutics, Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Organization, Description of Business and Liquidity

NeuBase Therapeutics, Inc. and its subsidiaries (the “Company” or “NeuBase”) is developing a modular peptide-nucleic acid (“PNA”) antisense oligo (“PATrOL™”) platform to address genetic diseases, with a single, cohesive approach. NeuBase plans to use its platform to address diseases which have a genetic source, with an initial focus on gene silencing in myotonic dystrophy type 1 (“DM1”), Huntington’s disease (“HD”), and oncology, and in gene editing applications.

NeuBase is a preclinical-stage biopharmaceutical company and continues to develop its clinical and regulatory strategy with its internal research and development team, with a view toward prioritizing market introduction as quickly as possible. NeuBase’s disclosed programs are NT-0100 in HD, NT-0200 in DM1 and NT-0300 in *KRAS*-driven cancers.

The NT-0100 program is a PATrOL™-enabled therapeutic program being developed to target the mutant expansion in the HD DNA or RNA. The NT-0100 program includes proprietary PNAs which have the potential to be highly selective for the mutant copy of the gene versus the wild-type allele, the expectation being that the resultant therapy will be applicable for all HD patients as it directly targets the expansion itself, and the potential to be delivered systemically and address the brain and whole-body manifestations of the disease. PATrOL™-enabled drugs also have the unique ability to open DNA and RNA secondary structures and bind to either the primary nucleotide sequences or the secondary and/or tertiary structures.

The NT-0200 program is a PATrOL™-enabled therapeutic program being developed to target the mutant expansion in the DM1 disease RNA. The NT-0200 program has the potential to be highly selective for the mutant transcript versus the wild-type transcribed allele and the expectation to be effective for nearly all DM1 patients as it directly targets the expansion itself.

The NT-0300 program is a PATrOL™-enabled therapeutic program being developed to target the mutated *KRAS* gene. The program is comprised of candidate compounds that target two activating mutations in the *KRAS* gene at the DNA or RNA levels: G12D and G12V. NeuBase believes these candidate compounds, and subsequent further optimized compounds, have the potential to inhibit transcription and/or translation of the oncogenic mutations and slow or stop tumor growth.

In October 2022, the Company announced plans to expand its focus to include the advancement of the differentiated gene editing capabilities of its platform. The Company is currently identifying and evaluating multiple indications for potential future development.

Liquidity and Going Concern

The Company has had no revenues from product sales and has incurred operating losses since inception. As of March 31, 2023, the Company had \$3.8 million in cash and cash equivalents, and during the three months ended March 31, 2023, incurred a loss from operations of \$4.2 million and used \$3.4 million of cash in operating activities.

The accompanying unaudited condensed consolidated financial statements have been prepared assuming the Company will continue to operate as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from uncertainty related to its ability to continue as a going concern.

The Company’s future liquidity and capital funding requirements will depend on numerous factors, including:

- its ability to raise additional funds to finance its operations;
- its ability to maintain compliance with the listing requirements of The Nasdaq Capital Market (“Nasdaq”);
- the outcome, costs and timing of preclinical and clinical trial results for the Company’s current or future product candidates;
- litigation expenses and the extent and amount of any indemnification claims;
- the emergence and effect of competing or complementary products;
- its ability to maintain, expand and defend the scope of its intellectual property portfolio, including the amount and timing of any payments the Company may be required to make, or that it may receive, in connection with the licensing, filing, prosecution, defense and enforcement of any patents or other intellectual property rights;

NeuBase Therapeutics, Inc. and Subsidiaries
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(Unaudited)

- its ability to retain its current employees and the need and ability to hire additional management and scientific and medical personnel;
- the trading price of its common stock; and
- its ability to increase the number of authorized shares outstanding to facilitate future financing events.

The Company will likely need to raise substantial additional funds through issuance of equity or debt or completion of a licensing transaction for one or more of the Company's pipeline assets. If the Company is unable to maintain sufficient financial resources, its business, financial condition and results of operations will be materially and adversely affected. This could affect future development and business activities and potential future clinical studies and/or other future ventures. Failure to obtain additional equity or debt financing will have a material, adverse impact on the Company's business operations. There can be no assurance that the Company will be able to obtain the needed financing on acceptable terms or at all. Additionally, any equity financings will likely have a dilutive effect on the holdings of the Company's existing stockholders.

The Company expects to incur substantial operating losses and negative cash flows from operations for the foreseeable future. Accordingly, there are material risks and uncertainties that raise substantial doubt about the Company's ability to continue as a going concern. We will need to seek additional equity or debt financing to provide the capital required to maintain or expand our operations.

Change in Year End

On April 21, 2023, the Company's Board of Directors approved a change in the Company's fiscal year end from September 30 to December 31, effective for the fiscal year beginning January 1, 2023 and ending December 31, 2023. As a result of the change in year end, the Company will file a Transition Report on Form 10-QT for the period from October 1, 2022 through December 31, 2022. The Company's 2023 fiscal year will run from January 1, 2023 through December 31, 2023.

2. Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto as of and for the year ended September 30, 2022 included in the Company's Annual Report on Form 10-K (the "Annual Report") filed with the U.S. Securities and Exchange Commission ("SEC") on December 21, 2023. The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated during the consolidation process. The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The accompanying unaudited condensed consolidated financial statements have been prepared by the Company in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information and in accordance with the instructions to Form 10-Q and Article 8 of Regulation S-X. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted. In the opinion of management, the accompanying unaudited condensed consolidated financial statements for the periods presented reflect all adjustments, consisting of only normal, recurring adjustments, necessary to fairly state the Company's financial position, results of operations and cash flows. The unaudited condensed consolidated financial statements for the interim periods are not necessarily indicative of results for the full year. The preparation of these unaudited condensed consolidated financial statements requires the Company to make estimates and judgments that affect the amounts reported in the financial statements and the accompanying notes. The Company's actual results may differ from these estimates under different assumptions or conditions.

Use of Estimates

The preparation of 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 liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. The most significant estimates in the Company's unaudited condensed consolidated financial statements relate to the valuation of stock-based compensation and the valuation allowance of deferred tax assets resulting from net operating losses. These estimates and assumptions are based on current facts, historical experience and various other

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factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the recording of expenses that are not readily apparent from other sources.

The Company assesses and updates estimates each period to reflect current information, such as the considerations related to the impacts that the current economic environment could have on its significant accounting estimates. Actual results may differ materially and adversely from these estimates. To the extent there are material differences between the estimates and actual results, the Company's future results of operations will be affected.

Net Loss Per Share

Basic net loss per share is computed by dividing net loss applicable to common stockholders by the weighted average number of shares of common stock outstanding during each period. Diluted net loss per share includes the dilutive effect, if any, from the potential exercise or conversion of securities, such as convertible debt, warrants and stock options that would result in the issuance of incremental shares of common stock. In computing the basic and diluted net loss per share applicable to common stockholders, the weighted average number of shares remains the same for both calculations due to the fact that when a net loss exists, dilutive shares are not included in the calculation as the impact is anti-dilutive.

The following potentially dilutive securities outstanding as of March 31, 2023 and 2022 have been excluded from the computation of diluted weighted average shares outstanding, as they would be anti-dilutive:

	As of March 31,	
	2023	2022
Common stock purchase options	6,446,509	8,421,475
Restricted stock units	396,460	—
Common stock purchase warrants	180,000	875,312
	<u>7,022,969</u>	<u>9,296,787</u>

Recent Accounting Pronouncements

In November 2021, the FASB issued ASU No. 2021-10, "Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance", which amends disclosures to increase transparency of government assistance, including (i) the types of assistance, (ii) accounting for the assistance and (iii) the effect of the assistance on an entity's financial statements. The standard is effective for all business entities for annual periods beginning after December 15, 2021; therefore, it will be effective beginning with the Company's financial statements issued for the fiscal year ending December 31, 2022. While the adoption of this guidance will not have an impact on the Company's consolidated balance sheet or statement of operations, the adoption of this guidance may require additional annual disclosures in the Company's financial statements for the fiscal year ending December 31, 2023, which the Company is currently in the process of assessing.

In June 2022, the FASB issued ASU 2022-03, "ASC Subtopic 820 Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions" ("ASU 2022-03"). ASU 2022-03 amends ASC 820 to clarify that a contractual sales restriction is not considered in measuring an equity security at fair value and to introduce new disclosure requirements for equity securities subject to contractual sale restrictions that are measured at fair value. ASU 2022-03 applies to both holders and issuers of equity and equity-linked securities measured at fair value. The amendments in this ASU are effective for the Company in fiscal years beginning after December 15, 2023, and interim periods within those fiscal years. Early adoption is permitted for both interim and annual financial statements that have not yet been issued or made available for issuance. The Company is currently evaluating the impact of this pronouncement on its consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments- Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). This guidance introduces a new model for recognizing credit losses on financial instruments based on an estimate of current expected credit losses. ASU 2016-13 also provides updated guidance regarding the impairment of available-for-sale debt securities and includes additional disclosure requirements. The new guidance is effective for public business entities that meet the definition of a Smaller Reporting Company as defined by the Securities and Exchange Commission for

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Notes to Condensed Consolidated Financial Statements
(Unaudited)

interim and annual periods beginning after December 15, 2022. The Company adopted this guidance as of January 1, 2023, with minimal impact upon adoption.

3. Other Prepaid Expenses and Current Assets

The Company's prepaid expenses and other current assets consisted of the following:

	As of March 31, 2023 Unaudited	As of December 31, 2022 Unaudited
Prepaid research and development expense	\$ 64,032	\$ 67,027
Accounts receivable	—	150,000
Other prepaid expenses and other current assets	259,070	174,628
Total	<u>\$ 323,102</u>	<u>\$ 391,655</u>

4. Equipment

The Company's equipment consisted of the following:

	As of March 31, 2023 Unaudited	As of December 31, 2022 Unaudited
Laboratory equipment	\$ 2,964,067	\$ 3,048,579
Office equipment	259,978	259,978
Leasehold improvements	31,405	17,958
Total	3,255,450	3,326,515
Accumulated depreciation and amortization	(1,557,456)	(1,392,415)
Equipment, net	<u>\$ 1,697,994</u>	<u>\$ 1,934,100</u>

Depreciation expense for the three months ended March 31, 2023 and 2022 was approximately \$0.2 million and \$0.2 million, respectively.

5. Accrued Expenses and Other Current Liabilities

The Company's accrued expenses and other current liabilities consisted of the following:

	As of March 31, 2023 Unaudited	As of December 31, 2022 Unaudited
Accrued compensation and benefits	\$ 456,948	\$ 171,572
Accrued consulting settlement	—	225,000
Accrued professional fees	149,098	241,808
Accrued research and development	53,738	20,684
Accrued franchise tax	109,680	217,440
Accrued restructuring	—	316,032
Other accrued expenses	31,101	35,120
Total	<u>\$ 800,565</u>	<u>\$ 1,227,656</u>

NeuBase Therapeutics, Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(Unaudited)

6. Stockholders' Equity

Equity Purchase Agreement

On December 28, 2022, the Company entered into a purchase agreement (the "Equity Purchase Agreement") with Alumni Capital LP, a Delaware limited partnership ("Alumni Capital"), pursuant to which the Company agreed to sell, and Alumni Capital agreed to purchase, upon request of the Company in one or more transactions, a number of shares of the Company's common stock providing aggregate gross proceeds to the Company of up to \$3,000,000 (subject to the right, but not the obligation, of the Company to increase such amount up to \$10,000,000 pursuant to the terms of the Equity Purchase Agreement) (the "Maximum Investment Amount"). The Equity Purchase Agreement expires upon the earlier of the aggregate gross proceeds from the sale of shares of common stock meeting the Maximum Investment Amount or December 28, 2024.

Among other limitations, unless otherwise agreed upon by Alumni Capital, each individual sale of shares of common stock will be limited to a sale of shares of common stock of up to \$500,000 (subject to the right of the Company and Alumni Capital to mutually agree to increase such figure to \$1,000,000) and further limited to no more than the number of shares of common stock that would result in the direct or indirect beneficial ownership by Alumni Capital of more than 9.99% of the then-outstanding shares of common stock. Alumni Capital will purchase the shares of common stock under the Equity Purchase Agreement at the lowest traded price of the common stock during the three (3) business days immediately prior to the date of purchase of the shares of common stock multiplied by 95%.

Upon execution of the Equity Purchase Agreement, the Company issued 146,699 shares of common stock to Alumni Capital. The Company will issue to Alumni Capital, on December 28, 2023, shares of common stock in an amount equal to one-half of one percent (0.5%) of the Investment Amount (as defined in the Equity Purchase Agreement) divided by the closing price of the common stock on the third business day prior to the date of issuance and delivery of such shares of common stock. In addition, the Company will issue to Alumni Capital, on the date of expiration of the Equity Purchase Agreement, shares of common stock in an amount equal to one-half of one percent (0.5%) of the Investment Amount divided by the closing price of the common stock on the third business day prior to the date of issuance and delivery of such shares of common stock. If the Company elects to increase the Maximum Investment Amount, it shall issue to Alumni Capital Increase Commitment Shares (as defined in the Equity Purchase Agreement) (based on each increase of Investment Amount) within five (5) business days of the Company's written notice of such election. The Company recorded the commitment shares issued and future commitment share obligation as additional paid-in capital during the three months ended December 31, 2022.

As of March 31, 2023, the Company has not sold any shares of common stock under the Equity Purchase Agreement.

Warrants

Below is a summary of the Company's issued and outstanding warrants as of March 31, 2023:

NeuBase Therapeutics, Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(Unaudited)

Expiration date	Exercise Price	Warrants Outstanding
July 6, 2023	\$ 8.73	105,000
September 20, 2024	6.50	75,000
		<u>180,000</u>

	Warrants	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (in years)
Outstanding as of December 31, 2022	180,000	\$ 7.80	
Expired	—	—	
Outstanding as of March 31, 2023	<u>180,000</u>	7.80	0.8
Exercisable as of March 31, 2023	<u>180,000</u>	\$ 7.80	0.8

7. Stock-Based Compensation

As of March 31, 2023, an aggregate of 7,338,482 shares of common stock were authorized under the Company’s 2019 Stock Incentive Plan (the “2019 Plan”), subject to an “evergreen” provision that will automatically increase the maximum number of shares of common stock that may be issued under the term of the 2019 Plan. As of March 31, 2023, 2,068,551 shares of common stock were available for future grants under the 2019 Plan. As of March 31, 2023, 291,667 shares of common stock were authorized under the Company’s 2016 Consolidated Stock Incentive Plan (the “2016 Plan”) and 228,041 shares of common stock were available for future grants under the 2016 Plan.

The Company recorded stock-based compensation expense in the following expense categories of its unaudited condensed consolidated statements of operations for the three months ended March 31, 2023 and 2022:

	Three Months Ended March 31,	
	2023	2022
General and administrative	\$ 272,210	\$ 554,661
Research and development	44,479	398,167
Total	<u>\$ 316,689</u>	<u>\$ 952,828</u>

Stock Options

Below is a table summarizing the options issued and outstanding as of and for the three months ended March 31, 2023:

	Stock Options	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Life (in years)	Total Aggregate Intrinsic Value
Outstanding at December 31, 2022	7,310,686	2.66		
Granted	37,500	0.22		
Exercised	(655,000)	0.00		
Forfeited	(246,677)	6.18		
Outstanding at March 31, 2023	<u>6,446,509</u>	2.78	6.5	\$ 343,101
Exercisable as of March 31, 2023	<u>4,543,451</u>	\$ 2.96	5.5	\$ 343,101

As of March 31, 2023, unrecognized compensation costs associated with the stock options of \$.1 million will be recognized over an estimated weighted average amortization period of 1.5 years.

NeuBase Therapeutics, Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(Unaudited)

The intrinsic value of options exercised during the three months ended March 31, 2023 and 2022 was \$0.1 million and \$0.1 million, respectively.

The weighted average grant date fair value of options granted during the three months ended March 31, 2023 and 2022 was \$0.16 and \$1.40, respectively.

Key assumptions used to estimate the fair value of the stock options granted during the three months ended March 31, 2023 and 2022 included:

	Three Months Ended March 31,	
	2023	2022
Expected term of options (years)	5.4 - 6.1	5.3 - 6.1
Expected common stock price volatility	82.3% - 85.2%	73.8% - 77.2%
Risk-free interest rate	3.5% - 4.0%	1.4% - 2.6%
Expected dividend yield	—	—

Restricted Stock Units

Below is a table summarizing the restricted stock units granted and outstanding as of and for the three months ended March 31, 2023:

	Restricted Stock Units	Weighted- Average Grant Date Fair Value Price
Unvested as of December 31, 2022	—	\$ —
Granted	396,460	0.20
Forfeited	—	—
Unvested as of March 31, 2023	396,460	0.20
Total unrecognized expense remaining	\$ 77,178	
Weighted-average years expected to be recognized over	2.1	

8. Restructuring

Restructuring charges relate primarily to the Company's strategic restructuring to expand its focus to include the advancement of the differentiated gene editing capabilities of its platform. The Company recognized restructuring costs of approximately \$7 thousand during the three months ended March 31, 2023, comprised primarily of contract termination costs.

The following table summarizes activity in the Company's restructuring-related liability during the three months ended March 31, 2023:

	Liability at December 31, 2022	Restructuring Charges (Three Months Ended March 31, 2023)	Payments/ Utilization (Three Months Ended March 31, 2023)	Liability at March 31, 2023
Research and development contract termination costs	311,110	2,490	(313,600)	—
Other	4,922	4,237	(9,159)	—
Total Accrued restructuring	\$ 316,032	\$ 6,727	\$ (322,759)	\$ —

NeuBase Therapeutics, Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
(Unaudited)

9. Commitments and Contingencies

Litigation

The Company has become involved in certain legal proceedings and claims which arise in the normal course of business. The Company believes that an adverse outcome is unlikely, and it cannot reasonably estimate the potential loss at this point. If an unfavorable ruling were to occur, there exists the possibility of a material adverse impact on the Company's results of operations, prospects, cash flows, financial position and brand. Costs associated with the Company's involvement in legal proceedings are expensed as incurred.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Disclosures Regarding Forward-Looking Statements

The following should be read in conjunction with the unaudited condensed consolidated financial statements and the related notes that appear elsewhere in this report as well as in conjunction with the Risk Factors section in our Annual Report on Form 10-K for the fiscal year ended September 30, 2022, as filed with the United States Securities and Exchange Commission ("SEC") on December 21, 2022. This report and our Form 10-K include forward-looking statements made based on current management expectations pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, as amended.

This report includes "forward-looking statements" within the meaning of Section 21E of the Exchange Act. Those statements include statements regarding the intent, belief or current expectations of the Company and its subsidiaries and our management team. Any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and actual results may differ materially from those projected in the forward-looking statements. These risks and uncertainties include but are not limited to those risks and uncertainties set forth in Part II, Item 1A – Risk Factors of this Quarterly Report and in Part I, Item 1A – Risk Factors of our Annual Report on Form 10-K. In light of the significant risks and uncertainties inherent in the forward-looking statements included in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K, the inclusion of such statements should not be regarded as a representation by us or any other person that our objectives and plans will be achieved. Further, these forward-looking statements reflect our view only as of the date of this report. Except as required by law, we undertake no obligations to update any forward-looking statements and we disclaim any intent to update forward-looking statements after the date of this report to reflect subsequent developments. Accordingly, you should also carefully consider the factors set forth in other reports or documents that we file from time to time with the SEC.

Overview

We have designed, built, and validated a new technology platform (a peptide-nucleic acid antisense oligonucleobase platform, which we call PATrOL™) that can uniquely Drug the Genome™ to address the three disease-causing mechanisms (*i.e.*, gain-of-function, change-of-function, or loss-of-function of a gene), without the limitations of early precision genetic medicines. The technology is predicated on synthetic peptide-nucleic acid ("PNA") chemistry and can directly engage the genome in a sequence-specific manner and address root causality of diseases. These compounds operate by temporarily engaging the genome (or single and double-stranded RNA targets, if desired) and interacting with cellular machinery that processes mutant genes to halt their ability to manifest a disease.

We have repeatedly demonstrated in proof-of-concept preclinical animal studies the ability to address multiple disease-causing genes, and different causal mechanisms, to resolve the disease state without the limitations of early genetic medicine technologies. As further validation of our PATrOL™ platform's capabilities, in FY2021 and FY2022, we described data illustrating that our first-in-class platform technology can address various types of causal insults by Drugging the Genome™ in animal models of a variety of human diseases after patient-friendly routes of administration and does so in a well-tolerated manner.

We are developing precision genetic medicines targeting rare, monogenic diseases for which there are no approved therapies, as well as more common genetic disorders, including cancers that are resistant to current therapeutic approaches. Our disclosed pipeline includes therapeutic candidates for the treatment of DM1, HD, as well as cancer-driving point mutations in *KRAS*, G12V and G12D, which are involved in many tumor types and have historically been "undruggable". In October 2022, the Company announced plans to expand its focus to include the advancement of the differentiated gene editing capabilities of its platform. The Company is currently identifying and evaluating multiple indications for potential future development.

We were incorporated under the laws of the State of Delaware on August 4, 2009, as successor to BBM Holdings, Inc. (formerly known as Prime Resource, Inc., which was organized March 29, 2002 as a Utah corporation) pursuant to a reincorporation merger. On August 4, 2009, we reincorporated in Delaware as “Ohr Pharmaceutical, Inc.” On July 12, 2019, we completed the merger with NeuBase Corporation (formerly known as NeuBase Therapeutics, Inc.), a Delaware corporation (the “Merger”), and, upon completion of the Merger, we changed our name to “NeuBase Therapeutics, Inc.” Since the Merger, we have focused primarily on the development of our proprietary peptide-nucleic acid antisense oligo platform and preclinical-stage therapeutic candidates. Our platform technology and all of our therapeutic candidates are in the preclinical development stage. We have not initiated clinical trials for any of our product candidates, nor have any products been approved for commercial sale, and we have not generated any revenue. To date, we have not completed a clinical trial (including a pivotal clinical trial), obtained marketing approval for any product candidates, manufactured a commercial scale product or arranged for a third party to do so on our behalf, or conducted sales and marketing activities necessary for successful product commercialization. Drug development is also a highly uncertain undertaking and involves a substantial degree of risk. As a result, we have no meaningful historical operations upon which to evaluate our business and prospects and have not yet demonstrated an ability to obtain marketing approval for any of our product candidates or successfully overcome the risks and uncertainties frequently encountered by companies in the pharmaceutical industry. We also have not generated any revenues from collaboration and licensing agreements or product sales to date and continue to incur research and development and other expenses. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders’ equity and working capital, and our future success is subject to significant uncertainty.

For the foreseeable future, we expect to continue to incur operating losses, which we expect will increase significantly from recent historical levels as we advance our gene editing platform, expand our drug development activities, seek regulatory approvals for our product candidates and begin to commercialize them if they are approved by the U.S. Food and Drug Administration (the “FDA”), the European Medicines Agency (the “EMA”) or comparable foreign authorities. Even if we succeed in developing and commercializing one or more product candidates, we may never become profitable.

We expect to expend substantial funds in research and development, including preclinical studies and clinical trials for our platform technology and product candidates, and to manufacture and market any product candidates in the event they are approved for commercial sale. We will likely need additional funding to develop or acquire complementary companies, technologies and assets, as well as for working capital requirements and other operating and general corporate purposes. Moreover, an increase in our headcount would dramatically increase our costs in the near and long-term.

Such spending may not yield any commercially viable products. Due to our limited financial and managerial resources, we must focus on a limited number of research programs and product candidates and on specific indications. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities.

Because the successful development of our product candidates is uncertain, we are unable to precisely estimate the actual funds we will require to develop and potentially commercialize them. In addition, we may not be able to generate sufficient revenue, even if we are able to commercialize any of our product candidates, to become profitable.

The Company expects to incur substantial operating losses and negative cash flows from operations for the foreseeable future. Accordingly, there are material risks and uncertainties that raise substantial doubt about the Company’s ability to continue as a going concern. We will need to seek additional equity or debt financing to provide the capital required to maintain or expand our operations.

In particular, we expect that we will need to obtain additional funding to obtain clinical data from our current pipeline programs. We have based these estimates on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Our operating plans and other demands on our cash resources may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other capital sources, including potentially collaborations, licenses and other similar arrangements. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

There can be no assurance that we will be able to raise sufficient additional capital on acceptable terms or at all. If such additional financing is not available on satisfactory terms, or is not available in sufficient amounts, we may be required to delay, limit or eliminate the development of business opportunities, and our ability to achieve our business objectives, our competitiveness, and our business, financial condition and results of operations may be materially adversely affected. In addition, we may be required to grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Change in Year End

On April 21, 2023, the Company's Board of Directors approved a change in the Company's fiscal year end from September 30 to December 31, effective for the fiscal year beginning January 1, 2023 and ending December 31, 2023. As a result of the change in year end, the Company will file a Transition Report on Form 10-QT for the period from October 1, 2022 through December 31, 2022. The Company's 2023 fiscal year will run from January 1, 2023 through December 31, 2023.

Critical Accounting Estimates and Policies

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the amounts reported in our unaudited condensed consolidated financial statements and accompanying notes. Management bases its estimates on historical experience, market and other conditions, and various other assumptions it believes to be reasonable. Although these estimates are based on management's best knowledge of current events and actions that may impact us in the future, the estimation process is, by its nature, uncertain given that estimates depend on events over which we may not have control. If market and other conditions change from those that we anticipate, our unaudited condensed consolidated financial statements may be materially affected. In addition, if our assumptions change, we may need to revise our estimates, or take other corrective actions, either of which may also have a material effect in our unaudited condensed consolidated financial statements. We review our estimates, judgments, and assumptions used in our accounting practices periodically and reflect the effects of revisions in the period in which they are deemed to be necessary. We believe that these estimates are reasonable; however, our actual results may differ from these estimates.

Our critical accounting policies and estimates are discussed in our Annual Report on Form 10-K for the fiscal year ended September 30, 2022, and there have been no material changes to such policies or estimates during the three months ended March 31, 2023.

Recent Accounting Pronouncements

Please refer to Note 2, Significant Accounting Policies—Recent Accounting Pronouncements, in Item 1, Financial Statements, for a discussion of recent accounting pronouncements.

Results of Operations

Results of operations for the three months ended March 31, 2023, reflect the following changes from the three months ended March 31, 2022:

	Three Months Ended March 31,		
	2023	2022	Change
OPERATING EXPENSES			
General and administrative	\$ 2,917,315	\$ 3,093,713	\$ (176,398)
Research and development	1,240,246	6,835,670	(5,595,424)
Restructuring	6,727	—	6,727
TOTAL OPERATING EXPENSES	4,164,288	9,929,383	(5,765,095)
LOSS FROM OPERATIONS	(4,164,288)	(9,929,383)	5,765,095
OTHER INCOME (EXPENSE)			
Interest expense	(2,354)	(3,316)	962
Interest income	178,377	3,445	174,932
Other income (expense), net	(104,848)	5,225	(110,073)
Total other income (expense), net	71,175	5,354	65,821
NET LOSS	\$ (4,093,113)	\$ (9,924,029)	\$ 5,830,916

During the three months ended March 31, 2023, our operating loss decreased by \$5.8 million compared to the three months ended March 31, 2022. Our net loss decreased by \$5.8 million for the three months ended March 31, 2023, as compared to the three months ended March 31, 2022. Until we are able to generate revenue from product sales, our management expects to continue to incur net losses.

General and Administrative Expenses

General and administrative expenses consist primarily of legal and professional fees, wages and stock-based compensation. General and administrative expenses decreased by \$0.2 million for the three months ended March 31, 2023, as compared to the three months ended March 31, 2022, primarily due to a decrease in consulting and wage expenses.

Research and Development Expenses

The following table summarizes the Company's research and development expenses for the three months ended March 31, 2023 and 2022:

	Three Months Ended March 31,		
	2023	2022	Change
Research and development			
Professional consultation and other analytical work	\$ 400	\$ 940,028	\$ (939,628)
Lab Supplies, chemicals and manufacturing expenses	463,036	4,064,420	(3,601,384)
Employee wages, benefits, and payroll taxes	392,153	1,058,270	(666,117)
Stock-based compensation expense	44,479	398,167	(353,688)
Facility, depreciation and other expenses	340,178	374,785	(34,607)
Total research and development	\$ 1,240,246	\$ 6,835,670	\$ (5,595,424)

The decrease of approximately \$5.6 million of research and development expenses was primarily attributable to \$0.9 million of decreased professional consultation and other analytical work; \$3.6 million of decreased lab supplies, chemicals, and manufacturing expenses; \$0.7 million decrease of employee wages, benefits, and payroll taxes; \$0.4 million of decreased stock-based compensation expense; \$0.03 million of decreased equipment, depreciation, and facility costs. The overall decrease is primarily related to the Company's strategic restructuring to expand its focus to include the advancement of the differentiated gene editing capabilities of its platform. As part of the development pipeline shift to gene editing, the Company has deferred preclinical activities for its myotonic dystrophy type 1 (DM1), Huntington's disease (HD), and KRAS programs resulting in the overall decrease in research and development expenses for the three months ended March 31, 2023, as compared to the three months ended March 31, 2022.

Restructuring

Restructuring charges relate primarily to the Company's strategic restructuring to expand its focus to include the advancement of the differentiated gene editing capabilities of its platform. The Company recognized restructuring costs of approximately \$7 thousand during the three months ended March 31, 2023, comprised primarily of contract termination costs. No restructuring charges were incurred during the three months ended March 31, 2022.

The following table summarizes activity in the Company's restructuring-related liability during the three months ended March 31, 2023:

	Liability at December 31, 2022	Restructuring Charges (Three Months Ended March 31, 2023)	Payments/ Utilization (Three Months Ended March 31, 2023)	Liability at March 31, 2023
Research and development contract termination costs	311,110	2,490	(313,600)	—
Other	4,922	4,237	(9,159)	—
Total Accrued restructuring	\$ 316,032	\$ 6,727	\$ (322,759)	\$ —

Other Income (Expense), net

We recognized other income (expense), net of \$0.07 million during the three months ended March 31, 2023 was primarily related to interest income earned in our investment account, partially offset by interest expense.

Liquidity, Capital Resources, Going Concern, and Financial Condition

We have had no revenues from product sales and have incurred operating losses since inception. As of March 31, 2023, we had cash and cash equivalents of \$13.8 million. We have historically funded our operations through the sale of common stock and the issuance

of convertible notes and warrants. We expect to continue to incur significant operating losses for the foreseeable future and may never become profitable. As a result, we will likely need to raise additional capital through one or more of the following: the issuance of additional debt or equity or the completion of a licensing transaction for one or more of our pipeline assets.

Net working capital decreased from December 31, 2022 to March 31, 2023 by \$3.5 million (from \$15.8 million to \$12.3 million). We expect our annual cash burn to decrease in the fiscal year ending December 31, 2023, due to the restructuring actions that we have implemented since October 2022.

We entered into a purchase agreement with Alumni Capital in December 2022, pursuant to which Alumni Capital is obligated to purchase up to \$3.0 million of our common stock from time to time at our sole discretion over a 24-month period commencing on December 28, 2022. To date, we have not sold any shares of common stock under the purchase agreement.

At present, we have no bank line of credit. Should we need additional capital in the future, we will be primarily reliant upon a private or public placement of our equity or debt securities, or a strategic transaction, for which there can be no warranty or assurance that we may be successful in such efforts. If we are unable to maintain sufficient financial resources, our business, financial condition and results of operations will be materially and adversely affected. This could affect future development and business activities and potential future clinical studies and/or other future ventures. Failure to obtain additional equity or debt financing will have a material adverse impact on the Company's business operations. There can be no assurance that we will be able to obtain the financing needed to achieve our goals on acceptable terms or at all. Additionally, any equity financings would likely have a dilutive effect on the holdings of the Company's existing stockholders.

The Company expects to incur substantial operating losses and negative cash flows from operations for the foreseeable future. Accordingly, there are material risks and uncertainties that raise substantial doubt about the Company's ability to continue as a going concern.

Cash Flow Summary

The following table summarizes selected items in our unaudited condensed consolidated statements of cash flows:

	Three Months Ended March 31,	
	2023	2022
Net cash used in operating activities	\$ (3,447,911)	\$ (8,192,413)
Net cash used in investing activities	(4,947)	(148,411)
Net cash used in financing activities	(88,423)	(27,120)
Net decrease in cash and cash equivalents	<u>\$ (3,541,281)</u>	<u>\$ (8,367,944)</u>

Operating Activities

Net cash used in operating activities was approximately \$3.4 million for the three months ended March 31, 2023, as compared to approximately \$8.2 million for the three months ended March 31, 2022. Net cash used in operating activities in the three months ended March 31, 2023 was primarily the result of our net loss, a decrease in accrued expenses and other current liabilities and operating lease liability, partially offset by stock-based compensation expense, depreciation and amortization expenses, a decrease in prepaid insurance, other prepaid expenses and current assets and an increase in accounts payable. Net cash used in operating activities in the three months ended March 31, 2022 was primarily the result of our net loss and an increase in prepaid expenses and other current assets, partially offset by stock-based compensation expense, depreciation and amortization expenses and an increase in accounts payable and accrued expenses and other current liabilities.

Investing Activities

Net cash used in investing activities was approximately \$5 thousand for the three months ended March 31, 2023, as compared to \$0.2 million for the three months ended March 31, 2022. Net cash used in investing activities for the three months ended March 31, 2023 was primarily due to the purchase of leasehold improvements, and the proceeds received on sale of lab equipment. Net cash used in investing activities for the three months ended March 31, 2022 was primarily due to the purchase of laboratory and office equipment.

Financing Activities

Net cash used in financing activities was approximately \$0.08 million for the three months ended March 31, 2023, as compared to net cash used in financing activities of \$0.03 million for the three months ended March 31, 2022. Net cash used in financing activities for the three months ended March 31, 2023 primarily reflects principal payment of our finance lease liability and payment of issuance costs for the equity commitment, partially offset by the proceeds received from the exercise of stock options. Net cash used in financing activities for the three months ended March 31, 2022 primarily reflects the principal payment of our finance lease liability.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are a smaller reporting company, as defined by Rule 12b-2 of the Securities Exchange Act of 1934, as amended, and are not required to provide the information required under this item.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of March 31, 2023. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of March 31, 2023, our disclosure controls and procedures were effective to provide reasonable assurance that the 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 that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting during the quarterly period ended March 31, 2023.

PART II.

ITEM 1. LEGAL PROCEEDINGS

We have become involved in certain legal proceedings and claims which arise in the normal course of business. If an unfavorable ruling were to occur, there exists the possibility of a material adverse impact on our results of operations, prospects, cash flows, financial position and brand. Costs associated with the Company's involvement in legal proceedings are expensed as incurred.

ITEM 1A. RISK FACTORS

We operate in a dynamic and rapidly changing environment that involves numerous risks and uncertainties. Certain factors may have a material adverse effect on our business, prospects, financial condition and results of operations, and you should carefully consider them. Accordingly, in evaluating our business, in addition to other information contained in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed under the caption "Risk Factors" that appear in Item 1A of our Annual Report on Form 10-K for the year ended September 30, 2022, filed with the U.S. Securities and Exchange Commission ("SEC") on December 21, 2022. Other events that we do not currently anticipate or that we currently deem immaterial may also affect our business, prospects, financial condition and results of operations. Other than the following disclosed risk factors, there have been no material changes from the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended September 30, 2022.

Risks Related to the Company

Management has determined that there are factors that raise substantial doubt about our ability to continue as a going concern.

The accompanying unaudited condensed consolidated financial statements have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from uncertainty related to our ability to continue as a going concern. We have had no revenues from product sales and have incurred operating losses since inception. As of March 31, 2023, we had \$13.8 million in cash and cash equivalents and during the three months ended March 31, 2023, we incurred a loss from operations of \$4.2 million and used \$3.4 million of cash in operating activities. Our existing balance of cash and cash equivalents may not be sufficient to enable us to fund our operations for at least the next twelve months from the date that this Quarterly Report on Form 10-Q is filed with the SEC. These factors raise substantial doubt about our ability to continue as a going concern within one year from the issuance date of this filing.

Our ability to continue as a going concern is dependent on our ability to raise the required additional equity or debt financing to meet short and long-term operating requirements. We may also encounter business endeavors that require significant cash commitments or unanticipated problems or expenses that could result in a requirement for additional cash, including as a result of COVID-19 and its impacts. If we raise additional funds through the issuance of equity or convertible debt securities in the future, the percentage ownership of our current stockholders could be reduced, and such securities might have rights, preferences or privileges senior to our common stock. Additional financing may not be available upon acceptable terms, or at all. If adequate funds are not available or are not available on acceptable terms, we may not be able to take advantage of prospective business endeavors or opportunities, which could significantly and materially restrict our operations.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and results of operations.

As widely reported, global credit and financial markets have experienced volatility and disruptions in the past several years, including severely diminished liquidity and credit availability, rising inflation, rising interest rates, declines in consumer confidence, declines in economic growth, increases in unemployment rates, uncertainty about economic stability, failures of certain U.S. and international financial institutions and liquidity concerns at other financial institutions. There can be no assurances that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and price of the Company's common stock, and could require us to delay or abandon clinical development plans.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

Exhibit Number	Description	Incorporated by Reference			
		Form	File Number	Filing Date	Exhibit
2.1+	Agreement and Plan of Merger and Reorganization, dated as of January 2, 2019, by and among Ohr Pharmaceutical, Inc., Ohr Acquisition Corp. and NeuBase Therapeutics, Inc.	8-K	001-35963	1/3/2019	2.1
2.2	First Amendment to the Agreement and Plan of Merger and Reorganization, dated as of June 27, 2019, by and among Ohr Pharmaceutical, Inc., Ohr Acquisition Corp. and NeuBase Therapeutics, Inc.	8-K	001-35963	7/3/2019	2.1
3.1	Amended and Restated Certificate of Incorporation of the Company.	8-K	001-35963	7/12/2019	3.1
3.2	Amended and Restated Bylaws of the Company.	8-K	001-35963	9/23/2019	3.1
4.1	Form of Series A Warrant issued to investors pursuant to the Securities Purchase Agreement, dated December 7, 2016, by and among Ohr Pharmaceutical, Inc. and the purchasers listed therein.	8-K	001-35963	12/8/2016	4.1
4.2	Form of Warrant issued to investors pursuant to the Securities Purchase Agreement, dated as of April 5, 2017, by and among Ohr Pharmaceutical, Inc. and the purchasers listed therein.	8-K	001-35963	4/6/2017	4.1
4.3	Form of Common Stock Certificate.	S-8	333-233346	8/16/2019	4.17
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1**	Certification of Chief Executive Officer and Chief 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*	XBRL Instance Document.				
101.SCH*	XBRL Taxonomy Extension Schema Document.				
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.				
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.				

* Filed herewith.

** Furnished herewith.

+ All schedules and exhibits to the agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

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.

NeuBase Therapeutics, Inc.

Date: May 11, 2023

/s/ Todd Branning

Todd Branning

Chief Financial Officer

(Principal Financial and Accounting Officer)

**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, Dietrich Stephan, Ph.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NeuBase Therapeutics, 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):
 - 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 11, 2023

By: _____
/s/ Dietrich Stephan
Dietrich Stephan, Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

**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, Todd Branning, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NeuBase Therapeutics, 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):
 - 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 11, 2023

By: _____
/s/ Todd Branning
Todd Branning
Chief Financial Officer
(Principal Financial and Accounting Officer)

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

In connection with the Quarterly Report on Form 10-Q of NeuBase Therapeutics, Inc. (the "Company") for the period ended March 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to their knowledge 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.

By: _____	By: _____
<i>/s/ Dietrich Stephan</i> Dietrich Stephan, Ph.D. <i>President and Chief Executive Officer</i> (Principal Executive Officer) May 11, 2023	<i>/s/ Todd Branning</i> Todd Branning <i>Chief Financial Officer</i> (Principal Financial and Accounting Officer) May 11, 2023

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Report, is not deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.
