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 December 31, 2020
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 333-88480

NEUBASE THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**46-5622433**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

700 Technology Drive, Third Floor, Pittsburgh, PA 15219
(Address of principal executive offices and zip code)

(646) 450-1790
(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	☐	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 Act). Yes☐ No ☒

As of February 10, 2021, 23,180,024 shares of the common stock, par value $0.0001, of the registrant were outstanding.

Table of Contents

As previously disclosed on July 12, 2019, Ohr Pharmaceutical, Inc., a Delaware corporation ("Ohr"), completed a Merger with NeuBase Therapeutics, Inc., a Delaware corporation ("Legacy NeuBase"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization (the "Merger Agreement") entered into on January 2, 2019. Pursuant to the Merger Agreement, (i) a subsidiary of Ohr merged with and into Legacy NeuBase, with Legacy NeuBase (renamed as "NeuBase Corporation") continuing as a wholly-owned subsidiary of Ohr and the surviving corporation of the merger and (ii) Ohr was renamed as "NeuBase Therapeutics, Inc." (the "Merger").

For accounting purposes, the Merger was treated as a "reverse asset acquisition" under generally accepted accounting principles in the United States ("U.S. GAAP") and Legacy NeuBase was considered the acquirer. Accordingly, Legacy NeuBase's historical results of operations replaced the Company's (as defined below) historical results of operations for all periods prior to the Merger and, for all periods following the Merger, the results of operations of the post-merger combined company will be included in the Company's financial statements.

This quarterly report on Form 10-Q relates to the Company's quarter ended December 31, 2020 and is therefore the Company's sixth periodic report that includes results of operations for the combined company, including Legacy NeuBase.

Unless the context otherwise requires, references to the "Company," the "combined company," "we," "our" or "us" in this report refer to NeuBase Therapeutics, Inc. and its subsidiaries, references to "NeuBase" refer to the Company following the completion of the Merger and references to "Ohr" refer to the Company prior to the completion of the Merger.

Except as otherwise noted, references to "common stock" in this report refer to the common stock, par value $0.0001 per share, of the Company.

PART I.

ITEM 1. FINANCIAL STATEMENTS

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

	December 31, 2020	September 30, 2020
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$ 27,976,770	$ 31,992,283
Prepaid insurance	381,067	521,617
Other prepaid expenses and current assets	460,322	294,640
Total Current Assets	28,818,159	32,808,540
EQUIPMENT, net	1,292,388	1,166,934
OTHER ASSETS		
Investment	298,145	323,557
Long-term prepaid insurance	96,833	145,250
Security Deposit	253,565	-
Total Other Assets	648,543	468,807
TOTAL ASSETS	$ 30,759,090	$ 34,444,281
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$ 1,177,955	$ 1,505,042
Accrued expenses and other current liabilities	743,848	555,883
Warrant liabilities	320,039	950,151
Insurance note payable	-	138,557
Total Liabilities	2,241,842	3,149,633
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY		
Preferred stock, $0.0001 par value; 10,000,000 shares authorized; no shares issued and outstanding as of December 31, 2020 and September 30, 2020	-	-
Common stock, $0.0001 par value; 250,000,000 shares authorized; 23,177,591 and 23,154,084 shares issued and outstanding as of December 31, 2020 and September 30, 2020, respectively	2,317	2,315

Additional paid-in capital	76,139,964	74,850,935
Accumulated deficit	(47,625,033)	(43,558,602)
Total stockholders' equity	28,517,248	31,294,648
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 30,759,090	$ 34,444,281

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)

	Three Months ended December 31,	
	2020	**2019**
OPERATING EXPENSES		
General and administrative	$ 2,641,470	$ 2,554,680
Research and development	2,019,924	1,227,686
TOTAL OPERATING EXPENSES	4,661,394	3,782,366
LOSS FROM OPERATIONS	(4,661,394)	(3,782,366)
OTHER INCOME (EXPENSE)		
Interest expense	(9,737)	(1,311)
Change in fair value of warrant liabilities	630,112	(694,134)
Loss on disposal of fixed asset	-	(3,230)
Equity in losses on equity method investment	(25,412)	(24,509)
Total other income (expenses), net	594,963	(723,184)
NET LOSS	$ (4,066,431)	$ (4,505,550)
BASIC AND DILUTED LOSS PER SHARE	$ (0.18)	$ (0.26)
WEIGHTED AVERAGE SHARES OUTSTANDING:		
BASIC AND DILUTED	23,174,168	17,071,678

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

NeuBase Therapeutics, Inc. and Subsidiaries
Condensed Consolidated Statements of Stockholders' Equity
For the Three Months Ended December 31, 2020 and 2019
(Unaudited)

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	**Amount**	**Capital**	**Deficit**	**Equity**
Balance as of September 30, 2019	**17,077,873**	**$ 1,708**	**$ 36,201,758**	**$ (26,174,082)**	**$ 10,029,384**
Stock-based compensation expense	-	-	1,504,226	-	1,504,226
Net loss	-	-	-	(4,505,550)	(4,505,550)
Balance as of December 31, 2019	**17,077,873**	**$ 1,708**	**$ 37,705,984**	**$ (30,679,632)**	**$ 7,028,060**

	Common Stock		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	**Amount**	**Capital**	**Deficit**	**Equity**
Balance as of September 30, 2020	**23,154,084**	**$ 2,315**	**$ 74,850,935**	**$ (43,558,602)**	**$ 31,294,648**
Stock-based compensation expense	-	-	1,176,585	-	1,176,585
Issuance of restricted stock for services	1,931	-	-	-	-
Exercise of stock options	21,576	2	112,444	-	112,446
Net loss	-	-	-	(4,066,431)	(4,066,431)
Balance as of December 31, 2020	**23,177,591**	**$ 2,317**	**$ 76,139,964**	**$ (47,625,033)**	**$ 28,517,248**

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 December 31,	
	2020	**2019**
Cash flows from operating activities:		
Net loss	$ (4,066,431)	$ (4,505,550)
Adjustments to reconcile net loss to net cash used in operating activities		
Stock-based compensation	1,176,585	1,504,226
Change in fair value of warrant liabilities	(630,112)	694,134
Depreciation and amortization	68,117	149,746
Loss on disposal of fixed asset	-	3,230
Equity in losses on equity method investment	25,412	24,509
Loss on marketable securities	14,970	-
Changes in operating assets and liabilities		
Prepaid insurance, other expenses and current assets	(25,132)	(86,880)
Long-term prepaid insurance	48,417	48,417
Security Deposit	(253,565)	-
Accounts payable	(327,087)	(110,641)
Accrued expenses and other current liabilities	187,965	(162,677)
Net cash used in operating activities	(3,780,861)	(2,441,486)
Cash flows from investing activities		
Purchase of laboratory and office equipment	(193,571)	(68,400)
Purchase of marketable securities	(15,003,771)	-
Sale of marketable securities	14,988,801	-
Net cash used in investing activities	(208,541)	(68,400)
Cash flows from financing activities		
Principal payment of financed insurance	(138,557)	(73,426)
Proceeds from exercise of stock options	112,446	-
Net cash used in financing activities	(26,111)	(73,426)
Net decrease in cash and cash equivalents	(4,015,513)	(2,583,312)
Cash and cash equivalents, beginning of period	31,992,283	10,313,966
Cash and cash equivalents, end of period	**$ 27,976,770**	**$ 7,730,654**
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 10,400	$ 1,326
Cash paid for income taxes	$ -	$ -

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 and Description of Business

NeuBase Therapeutics, Inc. and subsidiaries (the "Company" or "NeuBase") is developing a modular peptide-nucleic acid ("PNA") antisense oligo ("PATrOL™") platform to address genetic diseases caused by mutant proteins, with a single, cohesive approach. The PATrOL™-enabled anti-gene therapies are designed to improve upon current genetic medicine strategies by combining the advantages of synthetic approaches with the precision of antisense technologies. NeuBase plans to use its platform to address diseases which have a genetic source, with an initial focus on Huntington's Disease ("HD") and Myotonic Dystrophy Type 1 ("DM1"), as well as other genetic disorders and cancer.

NeuBase is a pre-clinical-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 lead programs are NT0100 and NT0200.

The NT0100 program is a PATrOL™-enabled therapeutic program being developed to target the mutant expansion in the HD messenger ribonucleic acid ("RNA"). The NT0100 program includes several proprietary PNAs which have the potential to be highly selective for the mutant transcript vs. the wild-type transcribed allele and the expectation to be applicable for all HD patients as it directly targets the expansion itself, and has the potential to be delivered systemically. PATrOL™-enabled drugs also have the unique ability to open RNA secondary structures and bind to either the primary nucleotide sequences or the secondary and/or tertiary structures. NeuBase believes the NT0100 program addresses an unmet need for a disease which currently has no effective therapeutics that target the core etiology of the condition. NeuBase believes there is a large opportunity in the U.S. and European markets for drugs in this space.

The NT0200 program is a PATrOL™-enabled therapeutic program being developed to target the mutant expansion in the DM1 disease mRNA. The NT0200 program includes several proprietary PNAs which have 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. NeuBase believes the NT0200 program addresses an unmet need for a disease which currently has no effective therapeutics that target the core etiology of the condition. NeuBase believes there is also a large opportunity in the U.S. and European markets for drugs in this space.

2. Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the audited financial statements and notes thereto as of and for the year ended September 30, 2020 included in the Company's Annual Report on Form 10-K (the "Annual Report") filed with the SEC on December 23, 2020. 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, the fair value of warrant liabilities 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 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 economic considerations related to the impact that the novel coronavirus disease (COVID-19) could have on our significant accounting estimates (see Part II, Item 1A – Risk Factors—"*Our operations may be adversely affected by the coronavirus outbreak, and we face risks that could impact our business*" for further discussion of the effect of the COVID-19 pandemic on our operations). 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.

Fair Value Measurements

Fair value measurements are based on the premise that fair value is an exit price representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the following three-tier fair value hierarchy has been used in determining the inputs used in measuring fair value:

Level 1 – Quoted prices in active markets for identical assets or liabilities on the reporting date.

Level 2 – Pricing inputs are based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Pricing inputs are generally unobservable and include situations where there is little, if any, market activity for the investment. The inputs into the determination of fair value require management's judgment or estimation of assumptions that market participants would use in pricing the assets or liabilities. The fair values are therefore determined using factors that involve considerable judgment and interpretations, including but not limited to private and public comparables, third-party appraisals, discounted cash flow models, and fund manager estimates.

Financial instruments measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. Management's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability. The use of different assumptions and/or estimation methodologies may have a material effect on estimated fair values. Accordingly, the fair value estimates disclosed or initial amounts recorded may not be indicative of the amount that the Company or holders of the instruments could realize in a current market exchange.

Marketable Securities

Marketable securities are classified as trading and are carried at fair value. The Company's marketable securities consist of corporate bonds and highly liquid mutual funds and exchange-traded & closed-end funds which are valued at quoted market prices. The Company had no marketable securities as of December 31, 2020 and September 30, 2020.

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 December 31, 2020 and 2019 have been excluded from the computation of diluted weighted average shares outstanding, as they would be anti-dilutive:

	As of December 31,	
	2020	**2019**
Common stock purchase options	6,633,554	6,466,966
Unvested restricted stock	-	5,000
Common stock purchase warrants	820,939	715,939
	7,454,493	7,187,905

Recent Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2019-12, *"Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes"* ("ASU 2019-12"), which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. The Company is currently evaluating the impact of this standard 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 interim and annual periods beginning after December 15, 2022. Early adoption is permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements and related disclosures.

3. Liquidity and Going Concern

The Company has had no revenues from product sales and has incurred operating losses since inception. As of December 31, 2020, the Company had $28.0 million in cash and cash equivalents and during the three months ended December 31, 2020, incurred a loss from operations of $4.7 million and used $3.8 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;
- the extent and amount of any indemnification claims;
- 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;
- 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 one or more of the following: issuance of additional debt or equity, or complete 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, equity or debt 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.

4. Other Prepaid Expenses and Current Assets

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

	As of December 31, 2020	As of September 30, 2020
Prepaid research and development expense	$ 106,645	$ 205,641
Prepaid rent	301,481	-
Other prepaid expenses and other current assets	52,196	88,999
Total	$ 460,322	$ 294,640

5. Equipment

The Company's equipment consisted of the following:

	As of December 31, 2020	As of September 30, 2020	Estimated useful life (in years)
Laboratory equipment	$ 1,498,094	$ 1,319,123	5
Office equipment	21,077	6,477	3
Total	1,519,171	1,325,600	
Accumulated depreciation	(226,783)	(158,666)	
Property, plant and equipment, net	$ 1,292,388	$ 1,166,934	

Depreciation expense for the three months ended December 31, 2020 and 2019 was approximately $0.07 million and $0.03 million, respectively.

6. Investment

The Company owns common and preferred shares of DepYmed, Inc. ("DepYmed"), which in aggregate represents approximately 15% ownership of DepYmed. In addition, the Company is entitled to hold two of the six seats on DepYmed's board of directors.

The Company accounts for its investment in DepYmed common shares using the equity method of accounting and records its proportionate share of DepYmed's net income and losses in the accompanying unaudited condensed consolidated statements of operations. Equity in losses for the three months ended December 31, 2020 and 2019 were approximately $0.03 million and $0.02 million, respectively.

The Company accounts for its investment in preferred shares of DepYmed at cost, less any impairment, as the Company determined the preferred stock did not have a readily determinable fair value.

As of both December 31, 2020 and September 30, 2020, the carrying amount of the Company's aggregate investment in DepYmed was $0.3 million.

7. Accrued Expenses and Other Current Liabilities

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

	As of December 31, 2020	As of September 30, 2020
Accrued compensation and benefits	$ 57,274	$ 88,527
Accrued professional fees	407,235	241,755
Accrued research and development	40,656	41,313
Accrued franchise tax	194,831	155,865
Other accrued expenses	43,852	28,423
Total	$ 743,848	$ 555,883

8. Fair Value

The following tables present the Company's fair value hierarchy for its warrant liabilities measured at fair value on a recurring basis at December 31, 2020 and September 30, 2020:

	Fair Value Measurements as of December 31, 2020			
	(Level 1)	(Level 2)	(Level 3)	Total
Liabilities				
Warrant liabilities	$ -	-	320,039	$ 320,039

	Fair Value Measurements as of September 30, 2020			
	(Level 1)	(Level 2)	(Level 3)	Total
Liabilities				
Warrant liabilities	$ -	-	950,151	$ 950,151

The fair value of the warrant liabilities were determined using the Black-Scholes option pricing model. The following assumptions were used in determining the fair value of the warrant liabilities:

	As of December 31,	
	2020	2019
Remaining contractual term (years)	1 - 1.3	2.0- 2.3
Common stock price volatility	73.9%	84.9% - 86.2%
Risk-free interest rate	0.1%	1.58% - 1.63%

The Company was historically a private company and lacked company-specific historical and implied volatility information, therefore the Company estimated its expected stock volatility based on the historical volatility of a set of publicly traded peer companies. During the three months ended December 31, 2020, the Company utilized its historical volatility in the valuation of warrant liabilities as it had sufficient trading history.

The change in fair value of the warrant liabilities for the three months ended December 31, 2020 and 2019 is as follows:

Fair value as of September 30, 2020	$ 950,151
Change in fair value	(630,112)
Fair value as of December 31, 2020	$ 320,039
Fair value as of September 30, 2019	$ 496,343
Change in fair value	694,134
Fair value as of December 31, 2019	$ 1,190,477

As of December 31, 2020 and September 30, 2020, the recorded values of cash and cash equivalents, accounts payable and the insurance note payable approximate fair value due to the short-term nature of these instruments.

9. Stockholders' Equity

Warrants

Below is a summary of the Company's issued and outstanding warrants as of December 31, 2020:

Expiration date	Exercise Price	Warrants Outstanding
December 13, 2021	$ 55.00	20,627
April 10, 2022	20.00	695,312
July 6, 2023	8.73	105,000
		820,939

	Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)
Outstanding as of September 30, 2020	820,939	$ 19.44	1.7
Outstanding as of December 31, 2020	820,939	$ 19.44	1.4
Exercisable as of December 31, 2020	803,439	$ 19.67	1.4

10. Stock-Based Compensation

As of December 31, 2020, an aggregate of 4,709,277 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 December 31, 2020, 1,216,719 common shares were available for future grants under the 2019 Plan. As of December 31, 2020, 291,667 shares of common stock were authorized under the Company's 2016 Consolidated Stock Incentive Plan (the "2016 Plan") and 147,041 common shares 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 December 31, 2020 and 2019:

	Three Months ended December 31,	
	2020	2019
General and administrative	$ 842,279	$ 1,113,111
Research and development	334,306	391,115
Total	$ 1,176,585	$ 1,504,226

Stock Options

Below is a table summarizing the options issued and outstanding as of and for the three months ended December 31, 2020:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Total Aggregate Intrinsic Value
Outstanding at September 30, 2020	6,190,790	$ 2.76		
Granted	494,340	7.42		
Exercised	(21,576)	5.21		
Forfeited	(30,000)	4.80		
Outstanding at December 31, 2020	6,633,554	3.09	8.3	$ 27,071,221
Exercisable as of December 31, 2020	4,409,572	$ 1.51	8.0	$ 24,843,446

As of December 31, 2020, unrecognized compensation costs associated with the stock options of $5.8 million will be recognized over an estimated weighted-average amortization period of 1.4 years.

The weighted average grant date fair value of options granted during the three months ended December 31, 2020 and 2019 was $5.20 and $4.78, respectively.

Key assumptions used to estimate the fair value of the stock options granted during the three months ended December 31, 2020 and 2019 included:

	Three Months ended December 31,	
	2020	2019
Expected term of options (years)	6.0	7.0
Expected common stock price volatility	83.1% - 83.3%	78% - 81.1%
Risk-free interest rate	0.6% - 0.7%	1.7% - 1.8%
Expected dividend yield	-	-

During the three months ended December 31, 2020, the Company granted a stock option to purchase 225,000 shares to a consultant in recognition of future service to the Company as an employee. The exercisability and vesting of the stock options are subject to the consultant's effective date of employment with the Company, which has not yet occurred as of December 31, 2020, and as a result, the grant-date of such option has not occurred under GAAP. Therefore, the number and fair value of the shares subject to this option are not reflected in the table summarizing the options issued and outstanding as of and for the three months ended December 31, 2020, and did not have impact on unrecognized compensation costs or the estimated weighted-average amortization period above as of December 31, 2020.

Restricted Stock

A summary of the changes in the unvested restricted stock during the three months ended December 31, 2020 is as follows:

	Unvested Restricted Stock	Weighted Average Grant Date Fair Value Price
Unvested as of September 30, 2020	-	$ -
Granted	1,931	9.06
Vested	(1,931)	9.06
Unvested as of December 31, 2020	-	$ -

11. Commitments and Contingencies

Operating Leases

In October 2020, the Company entered into a ten-year lease agreement with annual escalating rental payments for office and laboratory space in Pittsburgh, Pennsylvania. The leased premises will serve as the Company's headquarters upon the commencement of the lease. The initial term of the lease commences upon the landlord's delivery of the leased premises in tenant improvement readiness condition. The initial term of the lease will extend approximately ten years from delivery of the leased premises to the Company, unless earlier terminated in accordance with the lease. The Company has the right to extend the term of the lease for an additional five-year term. Under the lease, the Company will lease approximately 14,189 square feet of the property. Pursuant to an amendment of the lease agreement during December 2020, the Company will pay an escalating base rent over the life of the lease of approximately $66,000 to $73,000 per month, and the Company will pay its pro rata portion of property expenses and operating expenses for the property. The Company will measure and recognize the ROU asset and operating lease liability upon lease commencement. During the three months ended December 31, 2020, the Company prepaid rent of $0.3 million and paid a security deposit of $0.3 million for this lease agreement. As of December 31, 2020, the lease has not yet commenced, and the Company estimates that the commencement will be in the second calendar quarter of 2021.

The Company currently leases its existing office and operating space under operating leases with original terms of less than 12 months and which expire at various dates through November 2021; therefore, the Company's operating leases are not recognized as ROU assets on the unaudited condensed consolidated balance sheet as of December 31, 2020.

Rent expense under the Company's operating leases totaled approximately $0.03 million and $0.02 million for the three months ended December 31, 2020 and 2019, respectively.

The Company continues to operate under its current operating lease in Pittsburgh on a month-to-month basis and will continue to operate under the lease until the Company's new headquarters and laboratory space is available for use. All terms and conditions remain the same from the current lease.

In November 2020, the Company extended the term of its rental of office space in New York until November 2021.

Litigation

The Company has 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 the Company's results of operations, prospects, cash flows, financial position and brand.

On February 14, 2018, plaintiff Jeevesh Khanna, commenced an action in the Southern District of New York, against Ohr and several current and former officers and directors, alleging that they violated federal securities laws between June 24, 2014 and January 4, 2018. On August 7, 2018, the lead plaintiffs, now George Lehman and Insured Benefit Plans, Inc., filed an amended complaint, stating the class period to be April 8, 2014 through January 4, 2018. The plaintiffs did not quantify any alleged damages in their complaint but, in addition to attorneys' fees and costs, they seek to maintain the action as a class action and to recover damages on behalf of themselves and other persons who purchased or otherwise acquired Ohr common stock during the putative class period and purportedly suffered financial harm as a result. The Company and the individuals dispute these claims and intend to defend the matter vigorously. On September 17, 2018, Ohr filed a motion to dismiss the complaint. On September 20, 2019, the district court entered an order granting the defendants' motion to dismiss. On October 23, 2019, the plaintiffs filed a notice of appeal of that order dismissing the action and other related orders by the district court. After full briefing and oral argument, on October 9, 2020, the U.S. Court of Appeals for the Second Circuit issued a summary order affirming the district court's order granting the motion to dismiss and remanding the action to the district court to make a determination on the record related to plaintiffs' request for leave to file an amended complaint. On October 16, 2020, the district court requested the parties' positions as to how they proposed to proceed in light of the Second Circuit's decision. After letter briefing on this issue and plaintiffs' alternative request for leave to file a second amended complaint, on November 16, 2020, the district court denied plaintiffs' request to amend and dismissed with prejudice plaintiffs' claims. On December 16, 2020, plaintiffs filed a notice of appeal of that order denying plaintiffs leave to amend, and on January 13, 2021, the Second Circuit entered a schedule for plaintiffs-appellants' opening brief to be filed by March 31, 2021. This litigation could result in substantial costs and a diversion of management's resources and attention, which could harm the Company's business and the value of its common stock.

On May 3, 2018, plaintiff Adele J. Barke, derivatively on behalf of Ohr, commenced an action against certain former directors of Ohr, including Michael Ferguson, Orin Hirschman, Thomas M. Riedhammer, June Almenoff and Jason S. Slakter in the Supreme Court, State of New York, alleging that the action was brought in the right and for the benefit of Ohr seeking to remedy their "breach of fiduciary duties, corporate waste and unjust enrichment that occurred between June 24, 2014 and the present." It does not quantify any alleged damages. The Company and the individuals dispute these claims and intend to defend the matter vigorously. Such litigation has been stayed pursuant to a stipulation by the parties, which has been so ordered by the court, pending a decision in the Southern District case on the motion to dismiss, but that status could change. This litigation could result in substantial costs and a diversion of management's resources and attention, which could harm the Company's business and the value of its common stock.

On March 20, 2019, a putative class action lawsuit was filed in the United States District Court for District of Delaware naming as defendants Ohr and its board of directors, Legacy NeuBase, and Merger Sub, captioned *Wheby v. Ohr Pharmaceutical, Inc., et al*., Case No. 1:19-cv-00541-UNA (the "Wheby Action"). The plaintiffs in the Wheby Action allege that the preliminary joint proxy/prospectus statement filed by Ohr with the Securities and Exchange Commission ("SEC") on March 8, 2019 contained false and misleading statements and omitted material information in violation of Section 14(a) of the Securities Exchange Act and SEC Rule 14a-9 promulgated thereunder, and further that the individual defendants are liable for those alleged misstatements and omissions under Section 20(a) of the Exchange Act. The complaint in the Wheby Action has not

been served on, nor was service waived by, any of the named defendants in that action. The action seeks, among other things, to rescind the Ohr Acquisition or an award of damages, and an award of attorneys' and experts' fees and expenses. The defendants dispute the claims raised in the Wheby Action. Management believes that the likelihood of an adverse decision from the sole remaining action is unlikely; however, the litigation could result in substantial costs and a diversion of management's resources and attention, which could harm the Company's business and the value of its common stock.

12. Subsequent Events

On January 27, 2021, the Company entered into an Asset Purchase Agreement by and among the Company, NeuBase Corporation, the Company's wholly-owned subsidiary, and Vera Therapeutics, Inc. ("Vera"). Pursuant to the terms of the Asset Purchase Agreement, the Company expects to acquire infrastructure, programs and intellectual property for several peptide-nucleic acid (PNA) scaffolds from Vera for total consideration of approximately $3.7 million, consisting of cash and a number of shares of the Company's common stock to be determined at the closing of the acquisition. The transaction is expected to close in the first calendar quarter of 2021.

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, 2020 as filed with the United States Securities and Exchange Commission ("SEC") on December 23, 2020. 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

Recent Developments

December 2020 Announcement of Positive Preclinical Data

On December 16, 2020, we announced additional positive preclinical data on our platform and DM1 program. *In vitro* data highlights in DM1 patient-derived fibroblasts include activity of an anti-gene (Compound A) that targets the CUG repeat in DM1:

- Compound A traffics to the nucleus, engages and normalizes DMPK mRNA.
- Compound A rescues mis-splicing of two key DM1 dysregulated transcripts (MBNL1 and MBNL2) within two days after initial treatment. Notably, induction of rescue continues to improve through day 9, the latest time point analyzed.
- Compound A significantly induces broad correction of global exon inclusion levels of mis-spliced transcripts.
    - Statistically significant improvement in global splicing as measured by the human differential splice inclusion (hDSI) statistic.
    - More than 175 dysregulated human transcripts achieved statistically significant improvement in splicing, many with completely normalized exon usage.
- DMPK protein levels remain unchanged 5 days after a single Compound A dose, supporting the hypothesized mechanism of action maintaining DMPK.

In vivo data highlights in the HSA^{LR} transgenic mouse model of DM1 that expresses high levels of mutant CUG-repeat-containing mRNA (*HSA*) in skeletal muscle:

- A single intravenous (IV) injection of 29 mg/kg of Compound A traffics to the nucleus and engages *HSA* mRNA within 24 hours in tibialis anterior (TA) skeletal muscle.
- A single intravenous (IV) injection of Compound A significantly induces broad correction of global exon inclusion levels of mis-spliced transcripts in HSA^{LR} TA skeletal muscle at day 13.

- Statistically significant improvement in global splicing as measured by the murine differential splice inclusion (mDSI) statistic.
    - More than 50 unique dysregulated murine transcripts achieved statistically significant improvement in splicing post-treatment, with many achieving complete normalization of appropriate exon usage.
- Compound A was well tolerated after single dose administration at the dose demonstrating activity *in vivo*.

March 2020 Announcement of Positive Preclinical Data

On March 31, 2020, we announced positive preclinical data from our pharmacokinetics studies in non-human primates ("NHPs") and *in vitro* pharmacodynamics data in patient-derived cell lines. Our pharmacokinetics studies in NHPs demonstrated, among other things: rapid uptake of our PATrOL™-enabled compound out of the body's circulation after systemic intravenous administration, with a half-life in circulation of approximately 1.5 hours; penetration by our PATrOL™-enabled compound in every organ system studied, including the central nervous system and skeletal muscle; and retention of therapeutically relevant doses for greater than one week after single-dose injection.

Our pharmacodynamics studies in patient-derived cell lines demonstrated, among other things: activity in engaging target disease-causing transcripts and knocking-down resultant malfunctioning mutant HTT protein levels preferentially over normal HTT protein knock-down; and dose-limiting toxicities were not observed relative to a control either at or above the doses demonstrating activity in human cells *in vitro*.

In addition, PATrOL™ enabled compounds were generally well-tolerated *in vivo* after systemic administration, both after single-dose administration in NHPs and multi-dose administration in mice for over a month.

We believe the intersection of the NHP pharmacokinetic data and the *in vitro* and *in vivo* pharmacodynamic data provides a roadmap to create a pipeline of therapeutic candidates which can reach target tissues of interest after systemic administration and achieve the desired activity at that dose. We believe that the data from these studies provides a roadmap for the future expansion of the Company's therapeutic pipeline into other indications.

Description of the Company

We are a biotechnology company accelerating the genetic revolution using a new class of synthetic medicines. Our modular peptide-nucleic acid antisense oligo ("PATrOL™") platform which outputs "anti-gene" candidate therapies is designed to combine the specificity of genetic sequence-based target recognition with a modularity that enables use of various *in vivo* delivery technologies to enable broad and also selective tissue distribution capabilities. Given that every human disease may have a genetic component, we believe that our differentiated platform technology has the potential for broad impact by increasing, decreasing or changing gene function at either the DNA or RNA levels to resolve the progression to disease, as appropriate in a particular indication. We plan to use our platform to address diseases driven by a genetic abnormality and we are initially focused on Huntington's disease ("HD") and myotonic dystrophy type 1 ("DM1").

Mutated proteins resulting from errors in deoxyribonucleic acid ("DNA") sequences cause rare genetic diseases and cancer. DNA in each cell of the body is transcribed into pre-messenger ribonucleic acid ("pre-mRNA"), which is then processed (spliced) into mRNA, which is exported into the cytoplasm of the cell and translated into a protein. This is termed the "central dogma" of biology. Therefore, when errors in a DNA sequence occur, they are often propagated into RNAs and can produce a damaging protein.

We are developing "anti-gene" therapies. Anti-genes are similar, but distinct, from antisense oligonucleotides (ASOs). ASOs are short single strands of nucleic acids (traditionally thought of as single-stranded RNA molecules) which bind to defective RNA targets in cells and inhibit their ability to form defective proteins. We believe we are a leader in the discovery and development of this new class of anti-gene drugs derived from peptide-nucleic acids ("PNAs"). The key differentiator between ASOs and anti-genes is that the scaffold is not derived from a natural sugar-phosphate nucleic acid backbone, rather is a synthetic polyamide which is charge-neutral (and thus high affinity to allow invasion of double-stranded targets), semi-rigid, and apparently non-biodegradable and immunologically inert. These features provide potential advantages over ASOs and other genetic therapies for modulating disease-causing genes including increased unique target opportunities, improved target specificity and a reduction in both sequence-dependent and independent toxicities. In addition, as these anti-genes are manufactured via standard peptide synthesis methods, they efficiently leverage the advancements in the synthetic peptide industry to enable modulating pharmacophore delivery, pharmacokinetics, sub-cellular placement and endosomal escape.

In addition to the scaffold, we also have a kit of natural nucleobases, chemically modified nucleobases which add further precision to a nucleic acid target of interest, and proprietary bi-specific nucleobases which can be added to the scaffold to allow precise target engagement. These bi-specific nucleobases, in particular, can be used in any combination to more specifically access double stranded DNA targets and RNA targets comprised of secondary structures such as hairpins (double stranded RNA targets which are folded upon themselves). This allows us to potentially access regions of the target transcript which may be unique in secondary structure to allow enhanced selectivity for the target (mutant) RNA as compared to the normal RNA. Enhanced selectivity for mutant RNAs as compared to normal RNAs is critical as normal RNAs are likely required for effective functioning of the cell. These bi-specific nucleotides can also target genomic loci and microRNAs in their double-stranded form.

A third component of the modular platform is the ability to add delivery technology to the pharmacophores so as to reach a desired cell or tissue upon *in vivo* administration. There is flexibility to append various delivery technologies to the pharmacophore to allow either broad tissue distribution or narrow cell and/or tissue targeting if so desired based on targets. One such technology is a chemical moiety that can be used to decorate the scaffold directly and allows the anti-genes to penetrate cell membranes and into subcellular compartments where they act as well as to distribute throughout the body when administered systemically.

Finally, in addition to the scaffold, modified nucleobases and delivery technology, the platform toolkit also includes linker technology which, when added to both ends of the PNAs, allow cooperative binding between individual drug molecules once they are engaged with the target RNA to form longer and more tightly bound drugs.

This toolkit of components forms the PATrOL™ platform and allows us to manufacture gene and transcript-specific anti-genes.

We are currently focused on therapeutic areas in which we believe our drugs will provide the greatest benefit with a significant market opportunity. We intend to utilize our technology to build out a pipeline of custom designed therapeutics for additional high-value disease targets. We are developing several preclinical programs using our PATrOL™ platform, including the NT0100 program, targeted at Huntington's disease ("HD"), a repeat expansion disorder, and the NT0200 program, targeted at myotonic dystrophy, type 1 ("DM1"). Preclinical studies are being conducted to evaluate the PATrOL™ platform technology and program candidates in the areas of pharmacokinetics, pharmacodynamics and tolerability, and we reported results from certain of those studies in the first calendar quarter of 2020 and have extended upon certain of those studies in the fourth calendar quarter of 2020 which illustrated that our anti-gene technology can be administered to human patient-derived cell lines and systemically (via intravenous (IV) administration) into animals with DM1 (a genetically modified model accepted as the most representative of the human disease) and can resolve the causal genetic defect. We expect to present additional results from ongoing preclinical studies evaluating the PATrOL ^{TM} platform and pipeline indications in the first half of calendar 2021, begin IND enabling studies in one or more of our programs in calendar year 2021 and begin a clinical trial in one or more of our programs in calendar 2022. See *"recent developments"* above for additional detailed results from certain of our preclinical studies. In addition, the emerging pipeline of other assets that target primary and secondary RNA structure and genomic DNA allows a unique market advantage across a variety of rare diseases and oncology targets.

Overall, using our PATrOL™ platform, we believe we can create anti-gene therapies that have distinct advantages over other chemical entities currently in the market or in development for genetic medicine applications to modulate mutant genes and resolve a clinical trait or disorder. These advantages may differ by indication and can include, among others:

- increased unique target opportunities, improved target specificity and a reduction in both sequence-dependent and independent toxicities by virtue of a synthetic polyamide scaffold which is charge-neutral (and thus high affinity to allow invasion of double-stranded targets) and semi-rigid which imparts precision to target engagement, and are apparently immunologically inert to not aggregate via charge-based interaction *in vivo*;
- potentially long durability by nature of the non-biodegradable polyamide scaffold;
- our anti-genes are manufactured via standard peptide synthesis methods and thus they efficiently leverage advances in the synthetic peptide industry to enable facile addition of known moieties enabling modulating pharmacophore delivery, pharmacokinetics, sub-cellular placement and endosomal escape; and
- our anti-genes can uniquely target double stranded structures in DNA and RNA, which allow unique target opportunities that standard ASOs cannot access.

With these unique component parts and their advantages, our PATrOL™ platform-enabled anti-gene therapies can potentially address a multitude of rare genetic diseases and cancer, among other indications.

We employ a rational approach to selecting disease targets, considering many scientific, technical, business and indication-specific factors before choosing each indication. We intend to build a diverse portfolio of therapies custom-designed to treat a variety of health conditions, with an initial emphasis on rare genetic diseases and cancers. A key component of this strategy is continuing to improve the scientific understanding and optimization of our platform technology and programs, including how various components of our platform technology perform, and our drug candidates impact the biological processes of the target diseases, so that we can utilize this information to reduce risk in our future programs and indications. In addition, with our expertise in discovering and characterizing novel anti-gene drugs, we believe that our scientists can optimize the properties of our PATrOL™-enabled drug candidates for use with particular targets that we determine to be of high value.

The depth of our knowledge and expertise with PNAs, bifacial and engineered nucleotides, genetics and genomics and therapeutic development of first-in-class modalities provides potential flexibility to determine the optimal development and commercialization strategy to maximize the near and longer-term value of our drug candidates.

We have distinct partnering strategies that we plan to employ based on the specific drug candidate, therapeutic area expertise and resources potential partners may bring to a collaboration. For some drug candidates, we may choose to develop and, if approved, commercialize them ourselves or through our affiliates. For other drug candidates, we may form single or multi asset partnerships leveraging our partners' global expertise and resources needed to support large commercial opportunities.

Globally, there are thousands of genetic diseases, most of which lack any therapeutic options. In addition, rare genetic diseases are often particularly severe, debilitating or fatal. Traditionally, therapeutic development for each rare genetic disorder has been approached with a unique strategy, which is inefficient, as there are thousands of diseases that need treatment solutions. The collective population of people with rare diseases stands to benefit profoundly from the emergence of a scalable and modular treatment development platform that allows for a more efficient discovery of drug product candidates to address these conditions cohesively.

Mutated proteins resulting from errors in deoxyribonucleic acid ("DNA") sequences cause many rare genetic diseases and cancer. DNA in each cell of the body is transcribed into pre-RNA, which is then processed (spliced) into mRNA which is exported into the cytoplasm of the cell and translated into protein. This is termed the "central dogma" of biology. Therefore, when errors in a DNA sequence occur, they are propagated to RNAs and can become a damaging protein.

Conceptually, we have learned that ASOs can inactivate target RNAs before they can produce harmful proteins by binding them in a sequence-specific manner, which can delay disease progression or even eliminate genetic disease symptoms. ASOs designed by others to target known disease-related mutant RNA sequences have been shown to be able to degrade these transcripts and have a positive clinical impact. Similarly, applications in modifying splicing of pre-RNA in the nucleus of the cell have been developed by others to exclude damaging exons from the final mRNA product and have been approved by the Food and Drug Administration ("FDA"). We plan to extend upon these conceptual breakthroughs by utilizing our first-in-class technology which we believe has significant benefits in certain application areas to better resolve a clinical disorder with well tolerated anti-gene therapies.

We believe the breadth of the PATrOL™ platform gives us the ability to potentially address a multitude of inherited genetic diseases. The technology may also allow us to target and inactivate gain-of-function and change-of-function mutations, and address targets in recessive disease and haploinsufficiencies by altering splicing to remove damaging exons/mutations or increasing expression of wild-type alleles by various means.

Gamma-modified scaffolds, an optimized version of which we utilize, have demonstrated preclinical*in vivo* efficacy in several applications which we believe can be translated across many targets and into humans. For example, in oncology such scaffolds have reduced expression of an activated oncogene (the epidermal growth factor receptor of the EGFR gene) and have modified gene regulation by targeting microRNAs to slow tumor growth. Such scaffolds have also demonstrated *in vivo* engagement with the double-stranded genome in studies done by others to perform *in vivo* single-base genome editing.

Product Pipeline

NT0100 Program - PATrOL™ Enabled Anti-Gene for Huntington's Disease

HD is a devastating rare neurodegenerative disorder. After onset, symptoms such as uncontrolled movements, cognitive impairments and emotional disturbances worsen over time. HD is caused by toxic aggregation of mutant huntingtin protein, leading to progressive neuron loss in the striatum and cortex of the brain. The wild-type huntingtin gene (HTT) has a region in which a three-base DNA sequence, CAG, is repeated many times. When the DNA sequence CAG is repeated 26 or fewer times in this region, the resulting protein behaves normally. While the wild-type function of HTT protein is largely uncharacterized, it is known to be essential for normal brain development. When the DNA sequence CAG is repeated 40 times or more in this region, the resulting protein becomes toxic and causes HD. Every person has two copies, or alleles, of the HTT gene. Only one of the alleles (the "mutant" allele) needs to bear at least 40 CAG repeats for HD to occur. HD is one of many known repeat expansion disorders, which are a set of genetic disorders caused by a mutation that leads to a repeat of nucleotides exceeding the normal threshold. Current therapies for patients with HD can only manage individual symptoms. There is no approved therapy that has been shown to delay or halt disease progression. There are approximately 30,000 symptomatic patients in the U.S. and more than 200,000 at-risk of inheriting the disease globally.

One especially important advantage of the PATrOL™ platform that makes it promising for the treatment of repeat expansion disorders like HD is the ability of our small anti-genes to potentially target the RNA hairpin. As the number of repeats increases, the PATrOL™ anti-genes bind more tightly to each other and the mutant RNA. This allows our therapies to potentially inactivate mutant HTT mRNA before it can be translated into harmful protein via selective binding to the expanded CAG repeats while leaving the normal HTT mRNA largely unbound to drug and producing functional protein. Achieving mutant allele selectivity would be a key advantage for any RNA-based approach aiming to treat HD. In March of 2020, we illustrated the ability of our anti-gene technology to enrich for translational inhibition and resultant mutant protein in human patient-derived cell lines versus wild-type HTT alleles. We illustrated that our anti-genes can inhibit ribosomal elongation via a high-affinity binding. The PATrOL™-enabled NT0100 program is currently in preclinical development for the treatment of HD.

NT0200 Program- PATrOL™ Enabled Anti-Gene for Myotonic Dystrophy Type 1

Our pipeline also contains a second potentially transformative medicine, which we believe has significant potential for DM1, a severe and rare trinucleotide repeat disease. DM1 is a multisystem disorder that primarily affects skeletal, cardiac and smooth muscle, as well as the brain. DM1 is caused by expansion of a CUG trinucleotide repeat in the 3' untranslated region (UTR), a noncoding region of the myotonic dystrophy protein kinase gene (DMPK) transcript, which captures and sequesters protein that have critical functions in the nucleus related to appropriate splicing of hundreds of transcripts. These sequestered proteins cannot then fulfill their normal functions. In addition, it has been documented that sequestration of the mutant transcripts in the nucleus results in their inability to be translated and results in haploinsufficiency, a situation where 50% of the protein in not enough to maintain normal function. Mice with both copies of their DMPK gene knocked out manifest a cardiac conduction defect (Berul CI, Maguire CT, Aronovitz MJ, Greenwood J, Miller C, Gehrmann J, Housman D, Mendelsohn ME, Reddy S. DMPK dosage alterations result in atrioventricular conduction abnormalities in a mouse myotonic dystrophy model. J Clin Invest. 1999 Feb;103(4):R1-7. doi: 10.1172/JCI5346. PMID: 10021468; PMCID: PMC408103.) and a CNS phenotype characterized

by abnormal long-term potentiation (Schulz PE, McIntosh AD, Kasten MR, Wieringa B, Epstein HF. A role for myotonic dystrophy protein kinase in synaptic plasticity. J Neurophysiol. 2003 Mar;89(3):1177-86. doi: 10.1152/jn.00504.2002. Epub 2002 Nov 13. PMID: 12612014.) hypothesized to be due to inappropriate cytoskeletal remodeling. We propose that our mechanism of action is via direct engagement of our anti-gene with the expanded CUG repeat hairpin structure in the 3' UTR of mutant transcript, invasion and opening of the hairpin structure, and release of the sequestered CUG-repeat binding proteins. This release of sequestered proteins which are normally involved in developmentally appropriate pre-mRNA splicing in the nucleus resolves the generalized splice defect and thus the major causal event. Our DM1 anti-gene is designed to not specifically degrade the mutant transcript, rather to release these RNA-protein aggregates through steric displacement, which could also resolve any haploinsufficiency and as a result may improve endophenotypes of the clinical condition, such as in the heart and brain (contingent on delivering effective concentrations of anti-gene to these tissues).

DM1 is characterized clinically by myotonia (inability to relax a muscle after contraction), muscle weakness, muscle wasting and a CNS endophenotype that is characterized by and is confirmed by molecular genetic testing of DMPK trinucleotiode repeat expansion. CTG repeat length (in the genome) exceeding 34 repeats is abnormal and often patients have hundreds or thousands of repeat units. Molecular genetic testing detects pathogenic variants in nearly 100% of affected individuals. It is estimated that the global prevalence of DM1 is 1 in 20,000 individuals. Our recent data illustrates that we are able to systemically deliver our anti-genes intravenously in DM1 genetic mouse models, engage the target in the skeletal muscles of the animals, and induce rescue of the causal splice defects.

Additional Indications

In addition, we are in the process of building an early stage pipeline of other therapies that focus on the unique advantages of our technology across a variety of diseases with an underlying genetic driver.

Critical Accounting Estimates and Policies

The preparation of financial statements in accordance with United States generally accepted accounting principles ("U.S. 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, 2020 and there have been no material changes to such policies or estimates during the three months ended December 31, 2020.

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 quarter ended December 31, 2020 reflect the following changes from the quarter ended December 31, 2019:

	Three Months ended December 31,		
	2020	2019	Change
OPERATING EXPENSES			
General and administrative	$ 2,641,470	$ 2,554,680	$ 86,790
Research and development	2,019,924	1,227,686	792,238
TOTAL OPERATING EXPENSES	4,661,394	3,782,366	879,028
LOSS FROM OPERATIONS	(4,661,394)	(3,782,366)	(879,028)
OTHER INCOME (EXPENSE)			
Interest expense	(9,737)	(1,311)	(8,426)
Change in fair value of warrant liabilities	630,112	(694,134)	1,324,246
Loss on disposal of fixed asset	-	(3,230)	3,230
Equity in losses on equity method investment	(25,412)	(24,509)	(903)
Total other expenses, net	594,963	(723,184)	1,318,147
NET LOSS	$ (4,066,431)	$ (4,505,550)	$ 439,119

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 increased by $0.09 million for the quarter ended December 31, 2020, as compared to the quarter ended December 31, 2019, primarily due to an increase in employee head count, taxes, and legal fees, partially offset by a decrease in stock-based compensation and accounting expenses.

Research and Development Expenses

Research and development expenses consist primarily of professional fees, research, development, and manufacturing expenses, and wages and stock-based compensation. Research and development expenses increased by $0.8 million for the quarter ended December 31, 2020, as compared to the quarter ended December 31, 2019, primarily due to an increase in manufacturing expenses, employee head count and the ramp up of research and development activities; partially offset by a decrease in professional fees.

Interest Expense

Interest expense consists primarily of interest on notes payable. Interest expense increased by $0.01 million for the quarter ended December 31, 2020, as compared to the quarter ended December 31, 2019.

Change in Fair Value of Warrant Liabilities

Change in fair value of warrant liabilities reflects the changes in the fair value of outstanding warrants which is primarily driven by changes in our stock price. The company recognized a gain of $0.6 million from the change in fair value of warrant liabilities for the quarter ended December 31, 2020, as compared to a loss of $0.7 million for the quarter ended December 31, 2019.

Equity in Losses on Equity Method Investment

The Company accounts for its investment in DepYmed common shares using the equity method of accounting and records its proportionate share of DepYmed's net income and losses. Equity in losses was $0.03 million for the quarter ended December 31, 2020, as compared to $0.02 million for the quarter ended December 31, 2019.

Liquidity, Capital Resources and Financial Condition

We have no revenues from product sales and have incurred operating losses since inception. As of December 31, 2020, we had an accumulated deficit of $47.6 million. The Company has historically funded its 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 the Company's pipeline assets.

Net working capital decreased from September 30, 2020 to December 31, 2020 by $3.1 million (to $26.6 million from $29.7 million). Our quarterly cash burn has increased significantly compared to prior periods due to increased research and development activities. We anticipate that our cash needs will likely continue to increase relative to prior periods as we increase our research and development activities, and believe that our current cash balance will provide sufficient capital to continue operations into the first calendar quarter of 2022.

At present, we have no bank line of credit or other fixed source of capital reserves. 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 needed financing to achieve its goals on acceptable terms or at all. 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 December 31,	
	2020	**2019**
Net cash used in operating activities	$ (3,780,861)	$ (2,441,486)
Net cash used in investing activities	(208,541)	(68,400)
Net cash used in financing activities	(26,111)	(73,426)
Net decrease in cash and cash equivalents	$ (4,015,513)	$ (2,583,312)

Operating Activities

Net cash used in operating activities was approximately $3.8 million for the quarter ended December 31, 2020, as compared to approximately $2.4 million for the quarter ended December 31, 2019. Net cash used in operating activities in the quarter ended December 31, 2020 was primarily the result of our net loss, the change in the fair value of warrant liabilities, and decreases in accounts payable, offset by our stock-based compensation expense. Net cash used in operating activities in the quarter ended December 31, 2019 was primarily the result of our net loss, offset by our stock-based compensation expense and the change in fair value of warrant liabilities.

Investing Activities

Net cash used in investing activities was approximately $0.2 million for the quarter ended December 31, 2020, as compared to $0.07 million for the quarter ended December 31, 2019. Net cash used in investing activities for both periods was primarily the result of purchases of laboratory equipment.

Financing Activities

Net cash used in financing activities was approximately $0.03 million for the quarter ended December 31, 2020, as compared to $0.07 million for the quarter ended December 31, 2019. Net cash used in financing activities for the quarter ended December 31, 2020 reflects the principal payments of financed insurance, net of proceeds from the exercise of stock options. Net cash used in financing activities for the quarter ended December 31, 2019 reflects the principal payments of financed insurance.

Off-Balance Sheet Arrangements

As of December 31, 2020, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

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 December 31, 2020. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of December 31, 2020, 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 December 31, 2020.

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.

On February 14, 2018, plaintiff Jeevesh Khanna, commenced an action in the Southern District of New York, against Ohr and several current and former officers and directors, alleging that they violated federal securities laws between June 24, 2014 and January 4, 2018. On August 7, 2018, the lead plaintiffs, now George Lehman and Insured Benefit Plans, Inc., filed an amended complaint, stating the class period to be April 8, 2014 through January 4, 2018. The plaintiffs did not quantify any alleged damages in their complaint but, in addition to attorneys' fees and costs, they seek to maintain the action as a class action and to recover damages on behalf of themselves and other persons who purchased or otherwise acquired Ohr common stock during the putative class period and purportedly suffered financial harm as a result. We and the individuals dispute these claims and intend to defend the matter vigorously. On September 17, 2018, Ohr filed a motion to dismiss the complaint. On September 20, 2019, the district court entered an order granting the defendants' motion to dismiss. On October 23, 2019, the plaintiffs filed a notice of appeal of that order dismissing the action and other related orders by the district court. After full briefing and oral argument, on October 9, 2020, the U.S. Court of Appeals for the Second Circuit issued a summary order affirming the district court's order granting the motion to dismiss and remanding the action to the district court to make a determination on the record related to plaintiffs' request for leave to file an amended complaint. On October 16, 2020, the district court requested the parties' positions as to how they proposed to proceed in light of the Second Circuit's decision. After letter briefing on this issue and plaintiffs' alternative request for leave to file a second amended complaint, on November 16, 2020, the district court denied plaintiffs' request to amend and dismissed with prejudice plaintiffs' claims. On December 16, 2020, plaintiffs filed a notice of appeal of that order denying plaintiffs leave to amend, and on January 13, 2021, the Second Circuit entered a schedule for plaintiffs-appellants' opening brief to be filed by March 31, 2021. This litigation could result in substantial costs and a diversion of management's resources and attention, which could harm the Company's business and the value of the Company's common stock.

On May 3, 2018, plaintiff Adele J. Barke, derivatively on behalf of Ohr, commenced an action against certain former directors of Ohr, including Michael Ferguson, Orin Hirschman, Thomas M. Riedhammer, June Almenoff and Jason S. Slakter in the Supreme Court, State of New York, alleging that the action was brought in the right and for the benefit of Ohr seeking to remedy their "breach of fiduciary duties, corporate waste and unjust enrichment that occurred between June 24, 2014 and the present." It does not quantify any alleged damages. We and the individuals dispute these claims and intend to defend the matter vigorously. Such litigation has been stayed pursuant to a stipulation by the parties, which has been so ordered by the court, pending a decision in the Southern District case on the motion to dismiss, but that status could change. This litigation could result in substantial costs and a diversion of management's resources and attention, which could harm our business and the value of our common stock.

On March 20, 2019, a putative class action lawsuit was filed in the United States District Court for District of Delaware naming as defendants Ohr and its board of directors, Legacy NeuBase and Ohr Acquisition Corp., captioned *Wheby v. Ohr Pharmaceutical, Inc., et al.*, Case No. 1:19-cv-00541-UNA (the "Wheby Action"). The plaintiffs in the Wheby Action allege that the preliminary joint proxy/prospectus statement filed by Ohr with the SEC on March 8, 2019 contained false and misleading statements and omitted material information in violation of Section 14(a) of the Exchange Act and SEC Rule 14a-9 promulgated thereunder, and further that the individual defendants are liable for those alleged misstatements and omissions under Section 20(a) of the Exchange Act. The complaint in the Wheby Action has not been served on, nor was service waived by, any of the named defendants in that action. The action seeks, among other things, to rescind the Merger or an award of damages, and an award of attorneys' and experts' fees and expenses. The defendants dispute the claims raised in the Wheby Action. Management believes that the likelihood of an adverse decision from the sole remaining action is unlikely; however, the litigation could result in substantial costs and a diversion of management's resources and attention, which could harm our business and the value of our common stock.

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, 2020, filed with the U.S. Securities and Exchange Commission ("SEC") on December 23, 2020. 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 as disclosed below, 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, 2020.

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 December 31, 2020, we had $28.0 million in cash and cash equivalents and during the three months ended December 31, 2020, incurred a loss from operations of $4.7 million and used $3.8 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 12 months from the date that this Quarterly Report 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 capital 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.

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 Consulting Warrants.	10-Q	001-35963	8/15/2011	10.21
4.2	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
4.3	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
4.4	Form of Common Stock Certificate.	S-8	333-233346	8/16/2019	4.17
10.1+	Lease Agreement, dated as of October 2, 2020, by and between NeuBase Therapeutics, Inc. and 350 Technology Drive Partners, LLC.	10-K	001-35963	12/23/2020	10.30
10.2*	First Amendment to Lease Agreement, dated December 28, 2020				
10.3#	Offer Letter of Employment, dated November 30, 2020, by and between NeuBase Therapeutics, Inc. and Curt Bradshaw	8-K	001-35963	12/2/2020	10.1
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.
\# Management compensatory plan or arrangement.
\+ 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: February 11, 2021

/s/ Sam Backenroth
Sam Backenroth
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 10.2

FIRST AMENDMENT TO LEASE AGREEMENT

THIS FIRST AMENDMENT TO LEASE AGREEMENT (this "Amendment") is made as of this 28 day of December, 2020, by and between 350 TECHNOLOGY DRIVE PARTNERS, LLC, a Pennsylvania limited liability company ("Landlord"), and NEUBASE THERAPEUTICS, INC., a Delaware corporation ("Tenant").

WITNESSETH:

WHEREAS, Landlord and Tenant are parties to that certain Lease Agreement dated as of October 2, 2020 (the "Lease"), pursuant to which Tenant leases from Landlord that certain space consisting of approximately fourteen thousand one hundred eighty-nine (14,189) rentable square feet of space known as Suite 400 (the "Leased Premises") in that certain building (the "Building") located at 350 Technology Drive, Pittsburgh, PA 15219, as such Leased Premises and Building are more particularly described in the Lease. All capitalized terms used in this Amendment shall have the same meanings ascribed thereto in the Lease unless otherwise defined or modified herein; and

WHEREAS, pursuant to the Lease, if the Cost of Tenant Improvements is greater than the Threshold Amount, Landlord and Tenant are required to enter into an amendment reflecting an increase in Annual Base Rent; and

WHEREAS, the Cost of Tenant Improvements is greater than the Threshold Amount and therefore Landlord and Tenant desire to adjust the Annual Base Rent as set forth in this Amendment; and

WHEREAS, Landlord and Tenant also desire to amend the suite number of the Leased Premises as set forth in this Amendment.

NOW, THEREFORE, for good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Landlord and Tenant, intending to be legally bound hereby, covenant and agree as follows:

1. Recitals. The foregoing recitals are incorporated into this Amendment by reference as if set forth in full.

2. Amendments to Lease. The Lease is hereby modified and amended as follows:

(a) Suite Number. The suite number of the Leased Premises, as referenced in Section 1.1 of the Lease, shall be Suite 421.

(b) Annual Base Rent. The table set forth in Section 3.1 of the Lease is hereby deleted in its entirety and the following table shall be substituted *in lieu* thereof:

Months of Lease Term	Base Rent per RSF	Annual Base Rent	Monthly Base Rent
1-3	-	-	$ 2,738.91
4-7	-	-	$ 47,339.67
8-12	$ 56.04	$ 795,099.96	$ 66,258.33
13-24	$ 56.52	$ 801,910.68	$ 66,825.89
25-36	$ 57.01	$ 808,863.36	$ 67,405.28
37-48	$ 57.50	$ 815,815.92	$ 67,984.66
49-60	$ 58.01	$ 823,052.28	$ 68,587.69
61-72	$ 58.52	$ 830,288.76	$ 69,190.73
73-84	$ 59.03	$ 837,525.12	$ 69,793.76
85-96	$ 59.56	$ 845,045.28	$ 70,420.44
97-108	$ 60.09	$ 852,565.44	$ 71,047.12
109-120	$ 60.63	$ 860,227.56	$ 71,685.63
121-123	$ 61.73	$ 875,835.36	$ 72,986.28

3. Conflicts. In the event of any conflict between the terms of this Amendment and the Lease, the terms of this Amendment shall govern.

4. No Waiver. Each party's execution of this Amendment shall not be deemed or construed to be a waiver of any of rights or remedies of the applicable party under the Lease (as amended hereby). Notwithstanding the foregoing, to the best of each of Landlord's and Tenant's knowledge, as of the date hereof, no uncured default, event of default, or breach by the other party exists under the Lease (as amended hereby), and no facts or circumstances exist that, with the passage of time or giving of notice, will or could constitute a default, event of default, or breach by the other party under the Lease (as amended hereby).

5. Full Force and Effect. Except as specifically modified and amended hereby, all terms of the Lease shall remain in full force and effect.

6. Binding Effect; No Modifications. This Amendment and all of its terms and conditions shall inure to the benefit of, and be binding upon, the parties hereto and their respective successors and assigns. No modifications or amendments of the Lease (as amended hereby) shall be binding unless such modification shall be in writing and signed by the parties thereto.

7. Brokers. Landlord and Tenant each represent and warrant to the other that there were no real estate agents or brokers involved in the negotiation and execution of this Amendment other than Burns Scalo Brokerage LLC, whose compensation shall be paid by Landlord in accordance with such party's agreement with such brokers. Landlord and Tenant shall each hold the other harmless from any claims for commissions, fees or compensation for the transactions described in the Lease (as amended hereby) by any other person or entity claiming to have acted as agent, representative or broker for such indemnifying party. The terms of this Section 7 shall survive the expiration or earlier termination of the Lease (as amended hereby).

8. Entire Agreement. The Lease and this Amendment constitute the entire agreement between the parties with respect to the subject matter herein contained and all prior negotiations with respect to the subject matter herein contained are merged into and incorporated into the Lease (as amended hereby) and all prior documents and correspondence between the parties with respect to the subject matter herein contained (other than the Lease) are superseded and of no further force or effect.

9. Counterparts; Delivery. This Amendment may be executed in any number of counterparts, and by each of the parties on separate counterparts, each of which, when so executed, shall be deemed an original, but all of which shall constitute but one and the same instrument. Delivery of an executed counterpart of this Amendment (i) by portable document format ("PDF") copy bearing the PDF signature of a duly authorized officer of any party hereto, whether delivered by facsimile, e-mail or physical delivery service ("PDF Signature"), or (ii) by electronic signature of a duly authorized officer of any party hereto, including, without limitation, "click through" acceptance, pursuant to electronic signature procedures such party may establish from time to time, including without limitation "docusign" ("Electronic Signature"), shall be equally as effective as delivery of a manually executed counterpart of this Amendment and shall constitute a valid and binding execution and delivery hereof. The parties hereto acknowledge and agree that: (x) each PDF Signature and/or Electronic Signature of such party will be enforceable to the same extent as a manual signature, whether in court or otherwise; and (y) such party will not raise any defenses or regulatory or statutory claims attempting to invalidate the enforceability of its PDF Signature or Electronic Signature.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK;
SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, and intending to be legally bound hereby, the parties hereto have executed this Amendment by their duly authorized officers or agents, as of the day and year first above written.

WITNESS/ATTEST:

LANDLORD:

350 TECHNOLOGY DRIVE PARTNERS, LLC,
a Pennsylvania limited liability company

By: 350 TECHNOLOGY DRIVE MANAGER, LLC,
a Pennsylvania limited liability company, its Manager

By: /s/ James D. Scalo
James D. Scalo, its sole member

WITNESS/ATTEST:

TENANT:

NEUBASE THERAPEUTICS, INC., a Delaware corporation

By: /s/ Dietrich A. Stephan
Dietrich A. Stephan, Chairman and CEO

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, 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: February 11, 2021

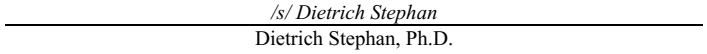
By: *  *
/s/ Dietrich Stephan
Dietrich Stephan, Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

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, Sam Backenroth, 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: February 11, 2021

By: */s/ Sam Backenroth*
Sam Backenroth
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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 December 31, 2020 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: *<u>/s/ Dietrich Stephan</u>*	By: *<u>/s/ Sam Backenroth</u>*
Dietrich Stephan, Ph.D.	Sam Backenroth
President and Chief Executive Officer	*Chief Financial Officer*
(Principal Executive Officer)	(Principal Financial and Accounting Officer)
February 11, 2021	February 11, 2021

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.