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

FORM 10-Q

(Mark One)

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

For the Quarterly Period Ended: September 30, 2024

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

For the transition period from to

Commission File Number: 001-38302

NRX PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**82-2844431**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1201 Orange Street, Suite 600
Wilmington, DE 19801
(Address of principal executive offices) (Zip Code)

(484) 254-6134
(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, par value $0.001 per share	NRXP	The Nasdaq Stock Market LLC
Warrants to purchase Common Stock	NRXPW	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

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 definitions of "large accelerated filer," "accelerated filer," "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

As of November 14, 2024, the registrant had 12,094,094 shares of Common Stock outstanding.

PART I FINANCIAL INFORMATION

ITEM 1. Financial Statements

NRX PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	September 30, 2024	December 31, 2023
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 1,646	$ 4,595
Prepaid expense and other current assets	2,460	2,289
Total current assets	4,106	6,884
Other assets	356	431
Total assets	$ 4,462	$ 7,315
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 4,866	$ 4,632
Accrued and other current liabilities	9,444	4,714
Accrued clinical site costs	403	524
Convertible note payable and accrued interest, current	3,050	9,161
Insurance loan payable	634	—
Warrant liabilities	1,902	17
Total current liabilities	20,299	19,048
Convertible note payable and accrued interest, long term	2,985	—
Total liabilities	$ 23,284	$ 19,048
Commitments and Contingencies (Note 8)		
Stockholders' deficit:		
Preferred stock, $0.001 par value, 50,000,000 shares authorized.	$ —	$ —
Series A convertible preferred stock, $0.001 par value, 12,000,000 shares authorized; 0 and 3,000,000 shares issued and outstanding at September 30, 2024 and December 31, 2023, respectively	—	3
Common stock, $0.001 par value, 500,000,000 shares authorized; 11,373,246 and 8,391,940 shares issued and outstanding at September 30, 2024 and December 31, 2023, respectively	11	8
Additional paid-in capital	250,362	241,406
Accumulated other comprehensive loss	—	(3)
Accumulated deficit	(269,195)	(253,147)
Total stockholders' deficit	(18,822)	(11,733)
Total liabilities and stockholders' deficit	$ 4,462	$ 7,315

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

NRX PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share data)
(Unaudited)

	Three months ended September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
Operating expense:				
Research and development	$ 611	$ 3,314	$ 5,163	$ 10,837
General and administrative	2,411	2,494	10,907	12,344
Settlement expense	—	—	—	250
Total operating expenses	3,022	5,808	16,070	23,431
Loss from operations	(3,022)	(5,808)	(16,070)	(23,431)
Other (income) expense:				
Interest income	(6)	(119)	(40)	(420)
Interest expense	—	40	230	40
Convertible note default penalty	—	—	849	—
Change in fair value of convertible notes payable	(1,355)	359	(1,014)	2,794
Change in fair value of warrant liabilities	(165)	(26)	(174)	(27)
Loss on convertible note redemptions	127	-	127	—
Total other (income) expense	(1,399)	254	(22)	2,387
Net loss	$ (1,623)	$ (6,062)	$ (16,048)	$ (25,818)
Comprehensive loss:				
Change in fair value of convertible note attributed to credit risk	$ 3	$ —	$ 3	$ 22
Other comprehensive loss	3	—	3	22
Comprehensive loss	$ (1,626)	$ (6,062)	$ (16,051)	$ (25,840)
Net loss per share:				
Basic and diluted	$ (0.15)	$ (0.74)	$ (1.59)	$ (3.48)
Weighted average common shares outstanding:				
Basic and diluted	10,973,697	8,194,696	10,108,859	7,411,418

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

NRX PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' (DEFICIT) EQUITY
(in thousands, except share data)
(Unaudited)

	Preferred Stock		Series A Preferred Stock		Common Stock		Additional Paid-in-Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance December 31, 2023	—	$ —	**3,000,000**	$ **3**	**8,391,940**	$ **8**	$ **241,406**	$ **(253,147)**	$ **(3)**	$ **(11,733)**
Stock-based compensation	—	—	—	—	—	—	242	—	—	242
Conversion of Series A preferred stock into common stock	—	—	(3,000,000)	(3)	300,000	—	3	—	—	—
At-the-market "ATM" offering, net of offering costs of $48	—	—	—	—	34,584	—	179	—	—	179
Common stock and warrants issued, net of issuance costs of $481	—	—	—	—	575,000	1	1,343	—		1,344
Common stock and warrants issued in private placement	—	—	—	—	270,000	—	1,027	—	—	1,027
Warrants issued pursuant to the Alvogen Agreement amendment (see Note 6)	—	—	—	—	—	—	—	—	—	—
Vesting of restricted stock awards	—	—	—	—	57,500	—	—	—	—	—
Shares issued as repayment of principal and interest for convertible note	—	—	—	—	143,648	1	399	—	—	400
Net loss	—	—	—	—	—	—	—	(6,528)	—	(6,528)
Balance - March 31, 2024	—	$ —	—	$ —	**9,772,672**	$ **10**	$ **244,599**	$ **(259,675)**	$ **(3)**	$ **(15,069)**
Stock-based compensation	—	—	—	—	—	—	97	—	—	97
ATM offering, net of offering costs of $118	—	—	—	—	247,868	—	1,228	—	—	1,228
Common stock and warrants issued, net of issuance costs of $494	—	—	—	—	698,050	1	1,913	—	—	1,914
Issuance of shares related to reverse stock split	—	—	—	—	73,040	—	—	—	—	—
Contract cost related to Alvogen termination (see Note 6)	—	—	—	—	—	—	1,336	—	—	1,336
Net loss	—	—	—	—	—	—	—	(7,897)	—	(7,897)
Balance - June 30, 2024	—	$ —	—	$ —	**10,791,630**	$ **11**	$ **249,173**	$ **(267,572)**	$ **(3)**	$ **(18,391)**
Stock-based compensation	—	—	—	—	—	—	104	—	—	104
ATM offering, net of offering costs of $31	—	—	—	—	103,063	—	219	—	—	219
Common stock issued in exchange for services	—	—	—	—	20,000	—	37	—	—	37
Shares issued as repayment of principal and interest for convertible note	—	—	—	—	458,553	—	829	—	—	829
Reclassification of AOCI upon settlement of Streeterville Note	—	—	—	—	—	—	—	—	3	3
Net loss	—	—	—	—	—	—	—	(1,623)	—	(1,623)
Balance - September 30, 2024	—	$ —	—	$ —	**11,373,246**	$ **11**	$ **250,362**	$ **(269,195)**	$ **—**	$ **(18,822)**

	Preferred Stock		Series A Preferred Stock		Common Stock		Additional Paid-in-Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' (Deficit) Equity
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance December 31, 2022	—	$ —	—	$ —	**6,644,299**	$ **7**	$ **230,399**	$ **(222,997)**	$ **—**	$ **7,409**
Common stock and warrants issued, net of issuance costs $351	—	—	—	—	386,667	—	2,545	—	—	2,545
Change in fair value of convertible note attributed to credit risk	—	—	—	—	—	—	—	—	106	106
Stock-based compensation	—	—	—	—	—	—	695	—	—	695
Net loss	—	—	—	—	—	—	—	(11,039)	—	(11,039)
Balance - March 31, 2023	—	$ —	—	$ —	**7,030,966**	$ **7**	$ **233,639**	$ **(234,036)**	$ **106**	$ **(284)**
Common stock and warrants issued, net of issuance costs $2,168	—	—	—	—	967,000	1	5,576	—	—	5,577
Change in fair value of convertible note attributed to credit risk	—	—	—	—	—	—	—	—	(128)	(128)
Stock-based compensation	—	—	—	—	—	—	544	—	—	544
Shares issued as repayment of principal and interest for convertible note	—	—	—	—	40,867	—	200	—	—	200
Net loss	—	—	—	—	—	—	—	(8,717)	—	(8,717)
Balance - June 30, 2023	—	$ —	—	$ —	**8,038,833**	$ **8**	$ **239,959**	$ **(242,753)**	$ **(22)**	$ **(2,808)**
Preferred stock and warrants issued, net of issuance costs $27	—	—	3,000,000	3	—	—	1,168	—	—	1,171
Stock-based compensation	—	—	—	—	—	—	351	—	—	351
Common stock issued to settle GEM settlement liability	—	—	—	—	67,568	—	250	—	—	250
Common stock issued as repayment of principal and interest for convertible note	—	—	—	—	285,555	—	782	—	—	782
Adjustment for deferred offering cost settlement	—	—	—	—	—	—	99	—	—	99
Net loss	—	—	—	—	—	—	—	(6,062)	—	(6,062)
Balance - September 30, 2023	—	$ —	**3,000,000**	$ **3**	**8,391,956**	$ **8**	$ **242,609**	$ **(248,815)**	$ **(22)**	$ **(6,217)**

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

NRX PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Nine months ended September 30,	
	2024	**2023**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (16,048)	$ (25,818)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	4	4
Stock-based compensation	443	1,590
Common stock issued in exchange for services	37	—
Change in fair value of warrant liabilities	(174)	(27)
Change in fair value of convertible promissory notes	(1,011)	2,794
Loss on convertible note redemptions	127	—
Expense for debt issuance costs due to fair value election on Anson Notes	521	—
Warrant issuance costs related to Alvogen termination	1,336	—
Convertible note default penalty	849	—
Non-cash settlement expense	—	250
Changes in operating assets and liabilities:		
Prepaid expense and other assets	(100)	1,554
Accounts payable	4,949	1,654
Insurance loan payable	634	—
Accrued expense and other liabilities	(106)	(466)
Net cash used in operating activities	(8,539)	(18,465)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of computer equipment	—	(4)
Net cash used in investing activities	—	(4)
CASH FLOWS FROM FINANCING ACTIVITIES		
Repayment of convertible note	(4,800)	(2,288)
Repayment of insurance note	—	(474)
Expense for debt issuance costs due to fair value election on Anson Notes	(521)	—
Proceeds from issuance of insurance loan	—	786
Proceeds from Anson convertible note, net	2,941	—
Proceeds from liability classified warrants	2,059	—
Proceeds from issuance of Series A preferred stock and warrants issued in private placement, net of issuance costs	—	1,171
Proceeds from issuance of common stock and warrants, net of issuance costs	4,884	—
Proceeds from issuance of common stock and warrants issued in private placement, net of issuance costs	1,027	8,122
Net cash provided by financing activities	5,590	7,317
Net decrease in cash and cash equivalents	(2,949)	(11,152)
Cash and cash equivalents at beginning of period	4,595	20,054
Cash and cash equivalents at end of period	$ 1,646	$ 8,902
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 374	$ 646
Cash paid for taxes	$ —	$ —
Non-cash investing and financing activities:		
Issuance of common stock as principal and interest repayment for convertible notes	$ 1,102	$ 982
Issuance of common stock warrants as offering costs	$ 188	$ 75
Issuance of common stock for settlement of accrued liability	$ —	$ 250
Conversion of Series A preferred stock into common stock	$ 3	$ —

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

NRX PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
September 30, 2024
(Unaudited)

1. Organization

The Business

NRx Pharmaceuticals, Inc. (Nasdaq: NRXP) ("*NRX*" or the "*Company*") is a clinical-stage bio-pharmaceutical company which develops and intends to distribute, through its wholly-owned operating subsidiaries, NeuroRx, Inc., ("*NeuroRx*") and HOPE Therapeutics, Inc. ("*HOPE*"), and collectively with NRX and NeuroRx, the "*Company*", "*we*", "*us*", or "*our*"), novel therapeutics for the treatment of central nervous system disorders including suicidal depression, chronic pain, and post-traumatic stress disorder ("*PTSD*") and now schizophrenia. All of our current drug development activities are focused drugs that modulate on the N-methyl-D-aspartate ("*NMDA*") receptor in the brain and nervous system, a neurochemical pathway that has been disclosed in detail in our annual filings. NeuroRx is organized as a traditional research and development ("*R&D*") company, whereas HOPE is organized as a specialty pharmaceutical company intended to distribute ketamine and other therapeutic options to clinics that serve patients with suicidal depression and PTSD. The Company has two lead drug candidates that are expected to be submitted by year end for Food and Drug Administration ("*FDA*") approval with anticipated FDA decision dates under the Prescription Drug User Fee Act ("*PDUFA*") by the end of June 2025: NRX-101, an oral fixed dose combination of D-cycloserine and lurasidone and NRX-100, a preservative-free formulation of ketamine for intravenous infusion. In February 2024, the Company incorporated HOPE as a wholly-owned subsidiary and in August 2024 completed a carve-out audit of HOPE's financial statements which are necessary for the intended Spin-Off (as defined in Note 7) of HOPE to the Company's shareholders at a future date.

Operations

The Company's drug development activities have expanded from its original focus on development of NRX-101, a fixed dose combination of D-cycloserine (DCS) and lurasidone for the treatment of suicidal bipolar depression to encompass the development of NRX-101 for the treatment of chronic pain and PTSD and to the development of intravenous ketamine (NRX-100/HTX-100) for the treatment of suicidal depression. These additional indications have been added as the Company has gained access to clinical trials data funded by governmental entities in France and potentially in the United States which has the potential to afford the Company potential safety and efficacy data on key indications at low cost.

2. Going Concern

These consolidated financial statements have been prepared on a going concern basis which contemplates the realization of assets and settlement of liabilities and commitments in the normal course of business. Since inception, the Company has experienced net losses and negative cash flows from operations each fiscal year and has a working capital deficit at September 30, 2024. The Company has no revenues and expects to continue to incur operating losses for the remainder of 2024. Although the Company projects operating revenue to be derived from the operation of clinical facilities through its HOPE subsidiary and sales of its pharmaceutical products in 2025, these projections are subject to completion of anticipated clinical acquisitions in the first case and regulatory approvals in the latter case. In the absence of these projected developments, the Company's ability to support its ongoing capital needs is dependent on its ability to continue to raise equity and/or debt financing, which may not be available on favorable terms, or at all, in order to continue operations.

As of September 30, 2024, the Company had $1.6 million in cash and cash equivalents. On August 12, 2024, the Company entered into that certain Securities Purchase Agreement dated August 12, 2024 (the "*Purchase Agreement*") with certain accredited investors (the "*Investors*"), pursuant to which the Company agreed to sell Senior Secured Convertible Promissory Notes (the "*Anson Notes*") in the aggregate principal amount of up to approximately $16.3 million in three tranches of $5.435 million, and warrants to purchase that amount of shares of the Company's Common Stock equal to 50% of the principal amount of the Notes in the respective tranche divided by the volume weighted average price ("*VWAP*") of the Company's Common Stock, as listed on the Nasdaq Capital Market, on the day prior to the closing of each respective tranche under the Purchase Agreement (the "*Anson Warrants*"). The Company consummated the sale of the first tranche of $5.435 million ($4.5 million in net proceeds) in Notes and Warrants (the "*First Closing*") on August 14, 2024 (the "*First Closing Date*"), and the second tranche of $5.435 million in Notes and Warrants (the "*Second Closing*") on October 10, 2024 (the "*Second Closing Date*"), for aggregate gross proceeds of approximately $10.87 million, before deducting fees, costs, and other expenses.

The Company has secured operating capital that it anticipates as sufficient to fund its drug development operations through year end and to finance submission of FDA New Drug Applications for NRX-100 and NRX-101. The Company may pursue additional equity or debt financing or refinancing opportunities in 2024 and 2025 to fund ongoing clinical activities, to meet obligations under its current debt arrangements and for general corporate purposes. Such arrangements may take the form of loans, equity offerings, strategic agreements, licensing agreements, joint ventures or other agreements. The sale of equity could result in additional dilution to the Company's existing shareholders. The Company cannot make any assurances that additional financing will be available to it and, if available, on acceptable terms, or that it will be able to refinance its existing debt obligations which could negatively impact the Company's business and operations and could also lead to a reduction in the Company's operations. The Company will continue to carefully monitor the impact of its continuing operations on the Company's working capital needs and debt repayment obligations. As such, the Company has concluded that substantial doubt exists regarding the Company's ability to continue as a going concern for a period of at least twelve months from the date of issuance of these condensed consolidated financial statements. The accompanying consolidated financial statements do not include any adjustments to reflect the recoverability and classification of recorded asset amounts and classification of liabilities that might be necessary should the company be unable to continue as a going concern.

The accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that may be necessary if the Company is unable to continue as a going concern.

3. Summary of Significant Accounting Policies

On April 1, 2024, the Company effected a reverse stock split (the "*Reverse Stock Split*") of the Company's common stock, $0.001 par value ("*Common Stock*"), at a ratio of 1-for-10. All historical share amounts, with the exception of the Company's Series A Preferred Stock, disclosed in this Quarterly Report on Form 10-Q have been retroactively adjusted to reflect the Reverse Stock Split. No fractional shares were issued as a result of the Reverse Stock Split, as fractional shares of Common Stock were rounded up to the nearest whole share. See Note 9. Equity for additional information.

Basis of Presentation and Principles of Consolidation

The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("*GAAP*") as determined by the Financial Accounting Standards Board ("*FASB*") Accounting Standards Codification ("*ASC*") and the rules and regulations of the Securities and Exchange Commission ("*SEC*") for interim financial information. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, the unaudited interim condensed consolidated financial statements reflect all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the consolidated balance sheet, statements of operations and cash flows for the interim periods presented. The results of operations for any interim periods are not necessarily indicative of the results that may be expected for the entire fiscal year or any other interim period.

Use of Estimates

The preparation of condensed consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in its consolidated financial statements and the reported amounts of expenses during the reporting period. The most significant estimates in the Company's condensed consolidated financial statements relate to the fair value of the convertible notes payable, fair value of warrant liabilities, fair value of stock options and warrants, and the utilization of deferred tax assets. 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. 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.

Certain Risks and Uncertainties

The Company's activities are subject to significant risks and uncertainties including the risk of failure to secure additional funding to properly execute the Company's business plan. The Company is subject to risks that are common to companies in the pharmaceutical industry, including, but not limited to, development by the Company or its competitors of new technological innovations, dependence on key personnel, reliance on third party manufacturers, protection of proprietary technology, and compliance with regulatory requirements.

Fair Value of Financial Instruments

FASB ASC Topic 820, *Fair Value Measurements* ("*ASC 820*"), provides guidance on the development and disclosure of fair value measurements. Under this accounting guidance, fair value is defined as 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 at the measurement date. 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 a liability.

The accounting guidance classifies fair value measurements in one of the following three categories for disclosure purposes:

Level 1: Quoted prices in active markets for identical assets or liabilities.

Level 2: Inputs other than Level 1 prices for similar assets or liabilities that are directly or indirectly observable in the marketplace.

Level 3: Unobservable inputs which are supported by little or no market activity and values determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation. (Refer to Note 11)

Concentration of Credit Risk and Off-Balance Sheet Risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents. Cash equivalents are occasionally invested in certificates of deposit. The Company maintains each of its cash balances with high-quality and accredited financial institutions and accordingly, such funds are not exposed to unusual credit risk beyond the normal credit risk associated with commercial banking relationships. Deposits in financial institutions may, from time to time, exceed federally insured limits. As of September 30, 2024 the Company's cash and cash equivalents balance within money market accounts was in excess of the U.S. federally insured limits by $1.2 million. The Company has not experienced any losses on its deposits of cash. The Company maintains a portion of its cash and cash equivalent balances in the form of a money market account with a financial institution that management believes to be creditworthy.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the time of initial purchase to be cash equivalents, including balances held in the Company's money market accounts. The Company maintains its cash and cash equivalents with financial institutions, in which balances from time to time may exceed the U.S. federally insured limits. The objectives of the Company's cash management policy are to safeguard and preserve funds to maintain liquidity sufficient to meet the Company's cash flow requirements, and to attain a market rate of return.

Revenue Recognition

The Company accounts for revenue under FASB ASC Topic 606, *Revenue for Contract with Customers* ("*ASC 606*") or other accounting standards for revenue not derived from customers. Arrangements may include licenses to intellectual property, research services and participation on joint research committees. The Company evaluates the promised goods or services to determine which promises, or group of promises, represent performance obligations. In contemplation of whether a promised good or service meets the criteria required of a performance obligation, the Company considers the stage of research, the underlying intellectual property, the capabilities and expertise of the customer relative to the underlying intellectual property, and whether the promised goods or services are integral to or dependent on other promises in the contract. When accounting for an arrangement that contains multiple performance obligations, the Company must develop judgmental assumptions, which may include market conditions, timelines and probabilities of regulatory success to determine the stand-alone selling price for each performance obligation identified in the contract.

The Company enters into contractual arrangements that may include licenses to intellectual property and research and development services. When such contractual arrangements are determined to be accounted for in accordance with ASC 606, the Company evaluates the promised good or services to determine which promises, or group of promises, represent performance obligations. When accounting for an arrangement that contains multiple performance obligations, the Company must develop judgmental assumptions, which may include market conditions, timelines and probabilities of regulatory success to determine the stand-alone selling price for each performance obligation identified in the contract.

The License Agreement (the "*License Agreement*") with Alvogen Pharma US, Inc., Alvogen, Inc. and Lotus Pharmaceutical Co. Ltd. (collectively, "*Alvogen*") (as further discussed in Note 6 below) was accounted for in accordance with ASC 606. In accordance with ASC 606, the Company recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that the Company determines are within the scope of ASC 606, it performs the following five steps:

i. identify the contract(s) with a customer;
ii. identify the performance obligations in the contract;
iii. determine the transaction price;
iv. allocate the transaction price to the performance obligations within the contract; and
v. recognize revenue when (or as) the entity satisfies a performance obligation.

The Company only applies the five-step model to contracts when it determines that it is probable it will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer.

At contract inception, once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within the contract to determine whether each promised good or service is a performance obligation. The promised goods or services in the Company's arrangements typically consist of a license to intellectual property and research services. The Company may provide options to additional items in such arrangements, which are accounted for as separate contracts when the customer elects to exercise such options, unless the option provides a material right to the customer. Performance obligations are promises in a contract to transfer a distinct good or service to the customer that (i) the customer can benefit from on its own or together with other readily available resources, and (ii) is separately identifiable from other promises in the contract. Goods or services that are not individually distinct performance obligations are combined with other promised goods or services until such combined group of promises meet the requirements of a performance obligation.

The Company determines transaction price based on the amount of consideration the Company expects to receive for transferring the promised goods or services in the contract. Consideration may be fixed, variable, or a combination of both. At contract inception for arrangements that include variable consideration, the Company estimates the probability and extent of consideration it expects to receive under the contract utilizing either the most likely amount method or expected amount method, whichever best estimates the amount expected to be received. The Company then considers any constraints on the variable consideration and includes in the transaction price variable consideration to the extent it is deemed probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

The Company then allocates the transaction price to each performance obligation based on the relative standalone selling price and recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) control is transferred to the customer and the performance obligation is satisfied. For performance obligations which consist of licenses and other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

The Company records amounts as accounts receivable when the right to consideration is deemed unconditional. When consideration is received, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a contract, a contract liability is recorded as deferred revenue.

The Company's revenue arrangements may include the following:

Milestone Payments: At the inception of an agreement that includes milestone payments, the Company evaluates each milestone to determine when and how much of the milestone to include in the transaction price. The Company first estimates the amount of the milestone payment that the Company could receive using either the expected value or the most likely amount approach. The Company primarily uses the most likely amount approach as that approach is generally most predictive for milestone payments with a binary outcome. Then, the Company considers whether any portion of that estimated amount is subject to the variable consideration constraint (that is, whether it is probable that a significant reversal of cumulative revenue would not occur upon resolution of the uncertainty.) The Company updates the estimate of variable consideration included in the transaction price at each reporting date which includes updating the assessment of the likely amount of consideration and the application of the constraint to reflect current facts and circumstances.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on a level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Research Services: The Company incurred research costs in association with the License Agreement. After the First Milestone Payment (as defined in Note 6 below), the Company would have been reimbursed for certain costs incurred related to reasonable and documented out-of-pocket costs for clinical and non-clinical development activities. The Company would have recognized revenue for the reimbursed costs when the First Milestone Payment contingencies had been achieved and the Company had an enforceable claim to the reimbursed costs.

Research and Development Costs

Research and development expense consists primarily of costs associated with the Company's clinical trials, salaries, payroll taxes, employee benefits, and stock-based compensation charges for those individuals involved in ongoing research and development efforts. Research and development costs are expensed as incurred. Advance payments for goods and services that will be used in future research and development activities are recorded as prepaid assets and expensed when the activity has been performed or when the goods have been received.

Non-cancellable Contracts

The Company may record certain obligations as liabilities related to non-cancellable contracts. If appropriate, the offsetting costs may be recorded as a deferred cost asset.

Convertible Notes Payable and Fair Value Election

As permitted under FASB ASC Topic 825, Financial Instruments ("*ASC 825*"), the Company elected to account for its promissory notes, which meet the required criteria, at fair value at inception. Subsequent changes in fair value are recorded as a component of non-operating loss in the consolidated statements of operations. The portion of total changes in fair value of the notes attributable to changes in instrument-specific credit risk are determined through specific measurement of periodic changes in the discount rate assumption exclusive of base market changes and are presented as a component of comprehensive income in the accompanying condensed consolidated statements of operations and comprehensive loss. As a result of electing the fair value option, direct costs and fees related to the promissory notes are expensed as incurred.

The Company estimates the fair value of its notes payable using a Monte Carlo simulation model, which uses as inputs the fair value of its Common Stock and estimates for the equity volatility of its Common Stock, the time to expiration (i.e., expected term) of the note, the risk-free interest rate for a period that approximates the time to expiration, and probability of default. Therefore, the Company estimates its expected future equity volatility based on the historical volatility of its Common Stock price utilizing a lookback period consistent with the time to expiration. The time to expiration is based on the contractual maturity date, giving consideration to the redemption features embedded in the notes. The risk-free interest rate is determined based on the U.S. Treasury yield curve in effect at the time of measurement for time periods approximately equal to the time to expiration. Unless otherwise specified, the probability of default is estimated using Bloomberg's Default Risk function which uses its financial information to calculate a default risk specific to the Company. At September 30, 2024, the Streeterville Note valuation was adjusted to the post settlement amount agreed upon. Interest expense is included within the fair value of the note payable. Management believes those assumptions are reasonable but if these assumptions change, it could materially affect the fair value.

Stock-Based Compensation

The Company expenses stock-based compensation to employees and non-employees over the requisite service period based on the estimated grant-date fair value of the awards. The Company accounts for forfeitures as they occur. Stock-based awards with graded-vesting schedules are recognized on a straight-line basis over the requisite service period for each separately vesting portion of the award. The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model, and the assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment. The Company estimates the fair value of restricted stock award grants using the closing trading price of the Company's Common Stock on the date of issuance. All stock-based compensation costs are recorded in general and administrative or research and development costs in the condensed consolidated statements of operations and comprehensive loss based upon the underlying individual's role at the Company.

Warrants

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in FASB ASC Topic 480, *Distinguishing Liabilities from Equity* ("*ASC 480*") and FASB ASC Topic 815, *Derivatives and Hedging* ("*ASC 815*"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own Common Stock and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be liability classified and recorded at their initial fair value on the date of issuance and remeasured at fair value and each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash gain or loss on the statements of operations. The Company generally determines fair value of the Common Stock Warrants (as defined below) using a Black Scholes valuation methodology.

A change in any of the terms or conditions of warrants is accounted for as a modification. The accounting for incremental fair value of warrants is based on the specific facts and circumstances related to the modification which may result in a reduction of additional paid-in capital, recognition of costs for services rendered, or recognized as a deemed dividend.

Preferred Stock

In accordance with ASC 480, the Company's Series A Preferred Stock was classified as permanent equity as it was not mandatorily redeemable upon an event that is considered outside of the Company's control. Further, in accordance with ASC 815-40, *Derivatives and Hedging – Contracts in an Entity's Own Equity*, the Series A Preferred Stock did not meet any of the criteria that would preclude equity classification. The Company concluded that the Series A Preferred Stock was more akin to an equity-type instrument than a debt-type instrument, therefore the conversion features associated with the convertible preferred stock were deemed to be clearly and closely related to the host instrument and were not bifurcated as a derivative under ASC 815.

Income Taxes

Income taxes are recorded in accordance with FASB ASC Topic 740, *Income Taxes* ("*ASC 740*"), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided, if based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit would more likely than not be realized assuming examination by the taxing authority. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. The Company recognizes any interest and penalties accrued related to unrecognized tax benefits as income tax expense.

Loss Per Share

The Company applies the two-class method when computing net income or loss per share attributable to common stockholders. In determining net income or loss attributable to common stockholders, the two-class method requires income or loss allocable to participating securities for the period to be allocated between common and participating securities based on their respective rights to share in the earnings as if all of the income or loss allocable for the period had been distributed. In periods of net loss, there is no allocation required under the two-class method as the participating securities do not have an obligation to fund the losses of the Company.

Basic loss per share of Common Stock is computed by dividing net loss attributable to common stockholders by the weighted average number of shares of Common Stock outstanding for the period. Diluted loss per share reflects the potential dilution that could occur if stock options, restricted stock awards and warrants were to vest and be exercised. Diluted earnings per share excludes, when applicable, the potential impact of stock options, Common Stock warrant shares, convertible notes, and other dilutive instruments because their effect would be anti-dilutive in the periods in which the Company incurs a net loss.

The following outstanding shares of Common Stock equivalents were excluded from the computation of the diluted net loss per share attributable to Common Stock for the periods in which a net loss is presented because their effect would have been anti-dilutive.

	Nine months ended September 30,	
	2024	**2023**
Stock options	131,833	254,885
Restricted stock awards	33,333	66,667
Common stock warrants	5,327,636	3,302,159
Anson Note	3,236,280	—
Convertible preferred stock	—	300,000

Recent Accounting Pronouncements Not Yet Adopted

In November 2023, the FASB issued Accounting Standard Update (ASU) No. 2023-07, Segment Reporting (Topic 280)-*Improvements to Reportable Segment Disclosures (ASU 2023-07)*, which is intended to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. ASU 2023-07 should be applied on a retrospective basis. ASU 2023-07 is effective for annual periods beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The Company is in the process of evaluating the impact of this new guidance on its disclosures.

In December 2023, the FASB issued ASU 2023-09-Income Taxes (Topic 740): I*mprovements to Income Tax Disclosures (ASU 2023-09)*, which is intended to enhance the transparency and decision usefulness of income tax disclosures, primarily by amending disclosure requirements for the effective tax rate reconciliation and income taxes paid. ASU 2023-09 should be applied on a prospective basis, and retrospective application is permitted. ASU 2023-09 is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The Company is in the process of evaluating the impact of this new guidance on its disclosures.

4. Prepaid Expense and Other Current Assets

Prepaid expense and other current assets consisted of the following at the dates indicated (in thousands):

	September 30, 2024 (Unaudited)	December 31, 2023
Prepaid expense and other current assets:		
Prepaid insurance	$ 1,185	$ 1,078
Prepaid clinical development costs	848	871
Other prepaid expense	421	334
Other current receivables	6	6
Total prepaid expense and other current assets	$ 2,460	$ 2,289

5. Accrued and Other Current Liabilities

Accrued and other current liabilities consisted of the following at the dates indicated (in thousands):

	September 30, 2024 (Unaudited)	December 31, 2023
Accrued and other current liabilities:		
Refund liability (see Note 6)	$ 4,715	$ —
Professional services	3,573	2,686
Employee costs	324	835
Accrued research and development expense	592	1,112
Other accrued expense	240	81
Total accrued and other current liabilities	$ 9,444	$ 4,714

6. Alvogen Licensing Agreement

In June 2023, the Company entered into a License Agreement with Alvogen. Under the License Agreement, the Company granted Alvogen certain license rights to develop, manufacture, and commercialize the Company's candidate therapeutic product, NRX-101, for the treatment of bipolar depression with suicidality. In exchange for the license granted and the participation of the Company in certain development, regulatory and commercial activities, Alvogen was obligated to pay the Company specified regulatory and commercial milestones, the first of which was $9 million upon the later of a positive data read-out from the Company's ongoing Phase 2b/3 clinical trial and completion of the Type B meeting with the FDA (the "*First Milestone Payment*"). In February 2024, the parties executed an amendment accelerating payment of up to $5 million related to the First Milestone Payment, with the remaining $4 million due upon the original agreement's terms (see below for advances received through September 30, 2024). As compensation for advancing the milestone, Alvogen received warrants to purchase up to 419,598 shares of the Company's Common Stock, at a strike price of $4.00 with a three year term (See Note 9). The grant date fair value of the warrants was approximately $1.3 million, which the Company planned to account for as consideration paid to a customer (see below). The second portion of the first milestone was to be $4 million and, as before, triggered by a positive response to the Company's planned end of phase 2 meeting with FDA. If the first milestone was not achieved by September 3, 2024, the Company would have been obligated to repay any amount received against the $5 million advance of the First Milestone Payment to Alvogen. As there was significant uncertainty relative to approval of any drug candidate in development, the Company concluded that it was not probable that a significant reversal of revenue would not occur if the Company were to include the First Milestone Payment, or any advances thereof, in the transaction price prior to receiving FDA approval. Accordingly, the transaction price was fully constrained and advances from Alvogen were recorded as a refund liability until such time as the refund right expired. Further, the Company accounted for the warrants issued to Alvogen within additional paid-in capital consistent with the accounting for unfunded stock subscription agreements until such time as the uncertainty around the First Milestone was resolved.

Termination

Under the License Agreement, as amended, Alvogen was granted early termination rights. On June 21, 2024, the Company received a notice of termination from Alvogen effective immediately. Following the termination of the License Agreement by Alvogen, the amounts advanced pursuant to the amendment became due and payable to Alvogen. Accordingly, the refund liability has not been reclassified as deferred revenue or recorded as revenue as of September 30, 2024.

Upon termination of the License Agreement, the intellectual property rights licensed to Alvogen under the License Agreement reverted to the Company, and all other rights and obligations of each of the parties immediately ceased, except for outstanding amounts owed as of the time of such expiration or termination. As of September 30, 2024, the refund liability due to Alvogen was $4.7 million, which represents all payments made by Alvogen through September 30, 2024, and is included as a component of accrued expense and other current liabilities on the condensed consolidated balance sheet (refer to Note 5). Following the early termination by Alvogen, the Company does not anticipate recognizing any revenue under the License Agreement. Additionally, in June 2024 the Company wrote-off the unfunded stock subscription receivable of $1.3 million related to the warrants previously classified in additional paid-in capital to research and development expense following the termination.

7. Debt

Streeterville Convertible Note

On November 4, 2022, the Company issued an 9% redeemable promissory note (as amended, the "*Streeterville Note*") to Streeterville Capital, LLC, a Utah limited liability company ("*Streeterville*"), for an aggregate principal amount of $11.0 million. The Streeterville Note originally matured 18 months from the date of issuance subject to certain acceleration provisions. The Streeterville Note carried an original issue discount of $1.0 million which was deducted from the principal balance of the Streeterville Note. The net proceeds from the issuance of the Streeterville Note was $10.0 million after transaction costs including the original issue discount, legal and other fees are included.

The initial terms of the Streeterville Note included the following provisions, certain of which were subsequently modified, as described below. The Company had the option to prepay the Streeterville Note during the term by paying an amount equal to 110% of the principal, interest, and fees owed as of the prepayment date. The noteholder had the right to redeem up to $1.0 million of the outstanding balance of the Streeterville Note per month starting six months after the issuance date (the "*Maximum Monthly Redemption Amount*"). Payments could be made by the Company at their option in: (i) in cash with a 10% premium (the "*Redemption Premium*") for the amount redeemed, (ii) by paying the redemption amount in the form of shares of Common Stock with the number of redemption shares being equal to the portion of the applicable redemption amount divided by the Redemption Conversion Price (as defined below), or (iii) a combination of cash and shares of Common Stock. The "*Redemption Conversion Price*" on any given redemption date equaled 85% multiplied by the average of the two lowest daily volume weighted average prices per share of the Common Stock during the ten trading days immediately preceding the date that the noteholder delivered notice electing to redeem a portion of the Streeterville Note. Beginning May 1, 2023, in the event (a) the daily dollar trading volume of the Common Stock of the Company on any given trading day was at least fifty percent (50%) greater than the lower of (i) the median daily dollar trading volume over the previous ten (10) trading days or (ii) the daily dollar trading volume on the trading day immediately preceding the date of measurement or (b) if the closing trade price on any given trading day was at least thirty percent (30%) greater than the Nasdaq Minimum Price, then the lender would be entitled to redeem over the following ten (10) trading days an amount of indebtedness then outstanding under the Streeterville Note equal to twice the monthly redemption amount of $1.0 million solely by payment by stock, if permitted under the agreement, subject to the Maximum Percentage (as defined in the Streeterville Note) and other ownership limitations.

The Streeterville Note contained certain Trigger Events (as defined in the Streeterville Note) that generally, if uncured within five trading days, could result in an event of default in accordance with the terms of the Streeterville Note (such event, an "*Event of Default*"). Upon an Event of a Default, the Lender could consider the Streeterville Note immediately due and payable. Upon an Event of Default, the interest rate could also be increased to the lesser of 18% per annum or the maximum rate permitted under applicable law (see below).

Due to these embedded features within the Streeterville Note, the Company elected to account for the Streeterville Note at fair value at inception. Subsequent changes in fair value were recorded as a component of other income (loss) in the consolidated statements of operations.

Convertible Note Amendments

On March 30, 2023, the Company entered into an Amendment to the Note (the "*First Amendment*"), pursuant to which the Maximum Percentage was set at 9.99% of the number of shares of Common Stock outstanding on a given date.

On July 7, 2023, the Company entered into Amendment #2 to the Streeterville Note with Streeterville (the "*Second Amendment*"). Pursuant to the Second Amendment, the Company agreed to amend the redemption provisions of the Streeterville Note to provide that the Company would pay to Streeterville an amount in cash equal to $1.8 million on or before July 10, 2023, which amount was paid on July 10, 2023. In addition, the Company agreed that, beginning on or before July 31, 2023, and on or before the last day of each month until December 31, 2023, the Company would pay Streeterville an amount equal to $0.4 million in cash, less any amount satisfied by the delivery of Redemption Conversion Shares (as defined below). Notwithstanding the foregoing, Streeterville could also submit a request for redemption of up to an aggregate of $1.0 million per month in accordance with the terms of the Second Amendment. However, the portion of each payment that was not satisfied by the delivery of Redemption Conversion Shares was the maximum amount of cash the Company would have been required to pay in accordance with the Second Amendment during the period from July 31, 2023 and on or before the last day of each month until December 31, 2023. The redemption of the Maximum Monthly Redemption Amount in excess of the Minimum Amount would be satisfied by the delivery of additional Redemption Conversion Shares.

On February 9, 2024, the Company entered into Amendment #3 to the Streeterville Note (the "*Third Amendment*"), with Streeterville. In accordance with the Third Amendment, the Company and Streeterville agreed to amend the redemption provisions of the Streeterville Note to provide that the Company would pay to Streeterville an amount in cash equal to $1.1 million on February 12, 2024, which the amount was paid on February 12, 2024. In addition, beginning on or before February 29, 2024, and on or before the last day of each month until July 31, 2024, the Company was obligated to pay Streeterville an amount equal to $0.4 million in cash, less any amount satisfied by the delivery of Redemption Conversion Shares. During the first three months of this amended payment period, Streeterville could not request to redeem amounts greater than $0.4 million per month.

After April 30, 2024, and for the remainder of the payment period through July 31, 2024, Streeterville could redeem any Redemption Amount (as defined in the Streeterville Note), including an amount in excess of the Minimum Payment, subject to the Maximum Monthly Redemption Amount. During the period through July 31, 2024, the Company was permitted to pay the Redemption Amounts by delivery of the Redemption Conversion Shares (as defined below) without regard to the existence of any Equity Conditions Failure, to the extent Streeterville submits redemption notices during such month pursuant to the terms of the Streeterville Note, and only for the Redemption Amounts covered by such notices. Moreover, the Redemption Premium would continue to apply to the Redemption Amounts. To the extent there was an outstanding balance under the Streeterville Note after July 31, 2024, the Company would be required to pay such outstanding balance in full in cash by August 31, 2024. As a result of the alleged Event of Default mentioned below, the Company did not pay any Redemption Amounts during the three months ended September 30, 2024, prior to the settlement, also as described below.

During the Minimum Payment Period (defined in the Streeterville Note, as amended), the Company was permitted to pay the Redemption Amounts in the form of shares of Common Stock of the Company (the "*Redemption Conversion Shares*") calculated on the basis of the Redemption Conversion Price (as defined in the Streeterville Note) without regard to the existence of an Equity Conditions Failure. Moreover, the Redemption Premium (as defined in the Streeterville Note) would continue to apply to the Redemption Amounts.

Both the Second Amendment and the Third Amendment (considered cumulatively with the Second Amendment) were deemed to be debt modifications and did not give rise to a debt extinguishment in accordance with FASB ASC Topic 470, *Debt*, which was accounted for prospectively. The modification did not result in recognition of a gain or loss in the consolidated statements of operations as the modifications were not considered debt extinguishments, but impacted interest expense recognized in subsequent periods, prior to the settlement of the Streeterville Note.

Convertible Note Fair Value Measurements

The Company estimated the fair value of the Streeterville Note using a Monte Carlo simulation model, which used as inputs the fair value of its Common Stock and estimated for the equity volatility and volume volatility of its Common Stock, the time to expiration of the Streeterville Note, the risk-free interest rate for a period that approximated the time to expiration, and probability of default. Therefore, the Company estimated its expected future volatility based on the actual volatility of its Common Stock and historical volatility of its Common Stock utilizing a lookback period consistent with the time to expiration. The time to expiration was based on the contractual maturity date, giving consideration to the mandatory and potential accelerated redemptions beginning six months from the issuance date. The risk-free interest rate was determined by reference to the U.S. Treasury yield curve in effect at the time of measurement for time periods approximately equal to the time to expiration. Probability of default was estimated using either Bloomberg's Default Risk function, which uses its financial information to calculate a default risk specific to the Company, or management's estimates which included, the Company's current cash runway, current efforts to raise financing, and current economic environment.

The discount to the principal amount was included in the carrying value of the Streeterville Note. During 2022, the Company recorded a debt discount of approximately $1.0 million upon issuance of the Streeterville Note for the original issue discount of $1.0 million. As a result of electing the fair value option, any direct costs and fees related to the Streeterville Note were expensed as incurred. For the three and nine months ended September 30, 2024, the Company recorded a gain from the change in fair value of the Streeterville Note of $2.1 million and $1.8 million, respectively, which was recognized in other (income) expense on the condensed consolidated statements of operations as a result of the Company's election of the fair value option. For the three and nine months ended September 30, 2023, the Company recorded a loss from the change in fair value of the Streeterville Note of $0.4 million and $2.8 million, respectively, which was recognized in other (income) expense on the condensed consolidated statements of operations as a result of the Company's election of the fair value option.

During the three and nine months ended September 30, 2024, the Company made cash payments for coupon interest on the Streeterville Note of approximately $0.4 million and $0.5 million, respectively, $0.2 million in cash of redemption premiums, made cash principal repayments of $2.1 million and $4.3 million, respectively, issued shares of Common Stock as coupon interest repayment of $0.1 million, issued shares of Common Stock as principal repayment of $0.3 million, and incurred a default penalty of $0.8 million. During the three and nine months ended September 30, 2023, the Company made cash payments for coupon interest on the Streeterville Note of approximately $0.5 million and $0.7 million, respectively, made cash principal repayments on the Streeterville Note of approximately $1.7 million and $1.8 million, respectively, issued shares of Common Stock as interest repayment of $0.1 million and $0.1 million, respectively and issued shares of Common Stock as principal repayment of $0.9 million and $0.9 million, respectively.

As of September 30, 2024, and December 31, 2023, the Streeterville Note carried a remaining balance of $3.0 million and $8.3 million, respectively. Refer to Note 11 for the reconciliation of the fair values for the periods presented.

Alleged Default

On April 24, 2024, the Company received written notice from counsel for Streeterville that an alleged event of default occurred with respect to the Streeterville Note issued by the Company in favor of Streeterville (the "*Notice*"). The Notice alleged that, among other things, (i) the announcement of the plan to partially spin-off of HOPE (the "*Spin-Off*"), constituted a "Fundamental Transaction" (as defined in the Streeterville Note) for which the Company failed to obtain Streeterville's prior written consent before undertaking such transaction; and (ii) the Company failed to pay the Minimum Payment, as defined in the Streeterville Note, by April 8, 2024, following a Redemption Notice issued on April 3, 2024 by Streeterville to the Company, each of which resulted in the failure to cure a Trigger Event and subsequent Event of Default of the Streeterville Note, resulting in the acceleration of all of the outstanding amounts due thereunder.

Streeterville also filed a complaint (the "*Complaint*") naming the Company as a defendant in the Third Judicial District Court of Salt Lake County, Utah. The Complaint was seeking, among other things: (i) declaratory relief for an order enjoining the Company from undertaking any Fundamental Transaction, including the Spin-Off, or otherwise issuing Common Stock or other equity securities (such as the shares of HOPE pursuant to the announced Spin-Off); and (ii) repayment of the Streeterville Note and other unspecified amounts of damages, costs and fees, but no less than $6.5 million, or the amounts currently outstanding under the Streeterville Note.

On July 29, 2024, in connection with the alleged Event of Default that Streeterville claimed occurred with respect to the Streeterville Note, the Company announced an order of the Utah arbitrator denying the petition of Streeterville to enjoin Spin-Off of 49% of shares in HOPE to current shareholders of the Company. The purpose of the proposed Spin-Off was to provide the Company's shareholders with valuable consideration and to provide HOPE (currently a wholly-owned subsidiary) with a sufficient shareholder base to enable future listing on a national exchange. The arbitrator also denied Streeterville's petition to enjoin the Company from selling additional shares of Common Stock to finance ongoing operations.

Streeterville Settlement

On August 12, 2024, the Company and Streeterville entered into a Settlement and Release of Claims (the "Settlement Agreement"), whereby the Company and Streeterville agreed to settle all disputes between the parties and release the Company from all obligations arising from the Notes at certain Securities Purchase Agreement, dated November 4, 2022 ("Streeterville Notes"), between the Company and Streeterville, and that certain Convertible Promissory Note, dated November 4, 2022, issued to Streeterville by the Company, in exchange for a payment of $2.5 million upon the initial closing of the sale of the Anson Notes, and within 60 days thereafter, a second payment of $3.05 million. The Company made the $2.5 million payment upon the Anson Notes closing on August 15, 2024. The Company made the $3.05 million payment in October 2024 (see Note 14).

The Company evaluated the terms of the Settlement Amendment in accordance with ASC 470-50, *Debt Modifications and Extinguishments*. Both the Settlement Amendment and the Third Amendment (considered cumulatively with the Settlement Amendment) were deemed to be debt modifications and did not give rise to a debt extinguishment in accordance with ASC Topic 470, *Debt*, which will be accounted for prospectively. The modifications did not result in recognition of a gain or loss in the consolidated statements of operations as the modifications were not considered debt extinguishments, but will impact interest expense and the determination of fair value in future periods.

Anson Convertible Promissory Notes

On August 12, 2024, the Company entered into the Purchase Agreement with Investors. The Company agreed to sell, in three equal tranches, original issue discount Anson Notes in the aggregate principal amount of up to approximately $16.3 million for an aggregate purchase price of up to approximately $15.0 million and warrants to purchase that amount of shares equal to 50% of the principal amount of the Notes divided by the VWAP of the Company's Common Stock, as listed on the Nasdaq Capital Market, on the day prior to the closing of each respective tranche under the Anson Warrants.

In connection with the above offering, the Company engaged EF Hutton LLC as placement agent (the "Placement Agent"), Pursuant to the terms of the engagement with the Placement Agent, the Company will pay a cash fee of 7% of the gross proceeds the Company receives in the offering at closing.

2024 Senior Secured Convertible Promissory Notes

On August 14, 2024, the Company entered into the first tranche Senior Secured Convertible Note Agreements (the "First Tranche Notes") with Anson Investment Master Fund LP and Anson East Master Fund LP (collectively "Anson") at various amounts for an aggregate of $5.435 million subject to an original issuance discount of 8% or $485,000, less other cash issuance costs of $521,000, resulting in net cash proceeds of $4.5 million, prior to any allocation to the Anson Warrants. The First Tranche Notes bear interest at a rate of 6% per annum (or 10% during the occurrence of any Event of Default (as defined in the First Tranche Notes)) and have a term of 15 months from the issuance date, maturing on November 14, 2025 (the "First Tranche Maturity Date") (see Note 9).

On August 14, 2024, in conjunction with the issuance of the First Tranche Notes, the Company issued warrants to purchase up to 1,349,305 shares of the Company's Common Stock.

The First Tranche Notes are convertible at the option of the holder at any time after issuance into Common Stock, at a per share conversion price equal to the lower of (a) $2.4168, (the "Fixed Conversion Price") or (b) a price equal to 92% of the lowest VWAP during the seven trading day period immediately preceding the effective conversion date ((the "Alternate Conversion Price", and together with the Fixed Conversion Price, the "Conversion Price"). If the Conversion Price is less than $0.38 (the "Floor Price"), then in addition to the issuance of Common Stock upon conversion the Company will pay cash as a true-up which is determined by the product of (i) the difference between (y) the Floor Price less (z) the Conversion Price then in effect, multiplied by (ii) the conversion amount that is being paid in Common Stock.

The terms of the First Tranche Notes do not allow any conversion of the First Tranche Notes if it results in Anson owning more than 4.99% of the outstanding shares of Common Stock (the "Beneficial Ownership Limitation"). This limitation can be adjusted up to 9.99% with prior notice, effective 61 days after such notice. Anson must ensure compliance with this limitation when submitting a notice of conversion, and the Company will rely on Anson's representation of compliance.

If the Company issues or grants options for Common Stock at a price lower than the current Conversion Price, the Conversion Price will be adjusted to match this lower price, (the "Base Conversion Price"). The Company must notify Anson of any such issuance, and Anson is entitled to convert shares based on the new Base Conversion Price.

If the Company offers purchase rights to holders of Common Stock, Anson will be entitled to acquire those rights as if they had fully converted the Note, subject to the Beneficial Ownership Limitation. If exercising these rights would exceed the Beneficial Ownership Limitation, the rights will be held in abeyance until they can be exercised without exceeding the limit.

The First Tranche Notes contain mandatory redemption features, whereby if at any time the First Tranche Notes are outstanding, the Company will be required to: (A) use up to 30% of the gross proceeds from any Subsequent Financings (as defined in the Purchase Agreement) in cash, to redeem all or a portion of the Note for an

amount equal to the outstanding principal, plus all accrued but unpaid interest, plus all liquidated damages (the "Redemption Obligations"), multiplied by 1.05 (the "Mandatory Redemption Amount"); (B) redeem all of the Redemption Obligations at the Mandatory Redemption Amount in the event of a Change of Control Transaction (as defined in the First Tranche Notes); (C) redeem the Redemption Obligations for the Mandatory Redemption Amount in the event a registration statement is not available for each of the offer and resale of the shares issuable upon conversion of the First Tranche Notes (the "Conversion Shares"); and (D) redeem the Redemption Obligations for the Mandatory Redemption Amount if the Shareholder Approval is not obtained within 180 days following the date of issuance of the First Tranche Notes.

The First Tranche Notes contain certain covenants, and events of default and triggering events, respectively, which would require repayment of the obligations outstanding pursuant to such instruments. The obligations of the Company pursuant to the First Tranche Notes are (i) secured by all assets of the Company and all subsidiaries of the Company pursuant to the Security Agreement and Patent Security Agreement, dated August 14, 2024, by and among the Company, the subsidiaries of the Company, and the Investors, and (ii) guaranteed jointly and severally by the subsidiaries of the Company pursuant to the Subsidiary Guarantee, dated August 14, 2024, by and among the Company, the subsidiaries of the Company, and the Investors.

Due to these embedded features within the First Tranche Notes, the Company elected to account for the First Tranche Notes at fair value at inception. Subsequent changes in fair value are recorded as a component of other income (loss) in the condensed consolidated statements of operations. Additionally the portion of changes in the fair value related to changes in credit risk are recorded to other comprehensive income in the consolidated statements of operations. To determine the initial carrying value of the Notes and the warrants issued to Anson under the First Tranche Notes (see Note 9), the Company allocated the proceeds using the relative fair value method. After allocation, the initial carrying value of the First Tranche Notes and the warrants issued to Anson were $2.9 million and $2.1 million, respectively. Refer to Note 11 for the reconciliation of the fair values for the periods presented.

During the three and nine months ended September 30, 2024 Anson converted $0.7 million of principal and interest into Common Stock, resulting in the issuances of 458,553 shares of Common Stock and loss on redemption of $0.1 million. As of September 30, 2024, the principal and accrued interest balance of the First Tranche Note was $4.7 million and less than $0.1 million, respectively. During the three and nine months ended September 30, 2024, the Company recorded a loss from the change in fair value of the First Tranche Notes of $0.7 million and $0.7 million, respectively, which was recognized in other (income) expense on the condensed consolidated statements of operations as a result of the Company's election of the fair value option. At September 30, 2024 the effective interest rate of the First Tranche Note was 69.3%.

8. Commitments and Contingencies

Sarah Herzog Memorial Hospital License Agreement

The Company is required to make certain payments related to the development of NRX-101 (the "*Licensed Product*") in order to maintain the license agreement with the Sarah Herzog Memorial Hospital Ezrat Nashim ("*SHMH*") (the "*SHMH License Agreement*"), including:

Milestone Payments

End of Phase I Clinical Trials of Licensed Product (completed)	$	100,000
End of Phase II Clinical Trials of Licensed Product (completed)	$	250,000
End of Phase III Clinical Trials of Licensed Product	$	250,000
First Commercial Sale of Licensed Product in U.S.	$	500,000
First Commercial Sale of Licensed Product in Europe	$	500,000
Annual Revenues Reach $100,000,000	$	750,000

The milestone payments due above may be reduced by 25% in certain circumstances, and by the application of certain sub-license fees. During the three and nine months ended September 30, 2024 and 2023, no payments were made.

Royalties

A royalty in an amount equal to: (a) 1% of revenues from the sale of any product incorporating a Licensed Product when at least one Licensed Patent remains in force, if such product is not covered by a Valid Claim (as defined below) in the country or region in which the sale occurs, or (b) 2.5% of revenues from the sale of any Licensed Product that is covered by at least one Valid Claim in the country or region in which such product is manufactured or sold. A "Valid Claim" means any issued claim in the Licensed Patents that remains in force and that has not been finally invalidated or held to be unenforceable. The royalty rates above may be doubled if we commence a legal challenge to the validity, enforceability or scope of any of the Licensed Patents during the term of the SHMH License Agreement and do not prevail in such proceeding.

Royalties shall also apply to any revenues generated by sub-licensees from sale of Licensed Products subject to a cap of 8.5% of the payments received by us from sub-licensees in connection with such sales. During the three and nine months ended September 30, 2023, no royalty payments were made.

Annual Maintenance Fee

A fixed amount of $100,000 was paid on April 16, 2021 and, thereafter, a fixed amount of $150,000 is due on the anniversary of such date during the term of the SHMH License Agreement.

Exclusive License Agreement

The Company has entered into a License Agreement with Apkarian Technologies to in-license US Patent 8,653,120 that claims the use of D-cycloserine for the treatment of chronic pain in exchange for a commitment to pay milestones and royalties as development milestones are reached in the field of chronic pain. The patent is supported by extensive nonclinical data and early clinical data that suggest the potential for NMDA antagonist drugs, such as NRX-101 to decrease both chronic pain and neuropathic pain while potentially decreasing craving for opioids. For the three and nine months ended September 30, 2024 and 2023, the Company has recorded no expenses relating to the licensure of the patent.

Legal Proceedings

The Company was a defendant in litigation filed by Streeterville in the Third Judicial District Court of Salt Lake County, Utah. See Note 7, Debt, for additional information. The Complaint sought, among other things: (i) declaratory relief for an order enjoining the Company from undertaking any Fundamental Transaction, including the Spin-Off, or otherwise issuing Common Stock or other equity securities (such as the shares of HOPE pursuant to the announced Spin-Off); and (ii) repayment of the Streeterville Note and other unspecified amounts of damages, costs and fees, but no less than $6,537,027, or the amounts currently outstanding under the Streeterville Note.

On July 29, 2024, in connection with the alleged Event of Default that Streeterville claimed occurred with respect to the Streeterville Note, the Company announced an order of the Utah arbitrator denying the petition of Streeterville to enjoin the planned Spin-Off of 49% of shares in HOPE to current shareholders of the Company. The purpose of the proposed Spin-Off was to provide the Company's shareholders with valuable consideration and to provide HOPE (currently a wholly-owned subsidiary) with a sufficient shareholder base to enable future listing on a national exchange. The arbitrator also denied Streeterville's petition to enjoin the Company from selling additional shares of Common Stock to finance ongoing operations.

On August 12, 2024, the Company signed a settlement agreement with Streeterville to retire its remaining debt for a settlement amount of $5.6 million and to settle outstanding litigation. This settlement amount was substantially less than the amounts claimed by Streeterville in its Compliant (see Note 7). As of September 30, 2024, the fair value of the Streeterville Note was adjusted to the settlement amount. Such adjustment is included within the change in fair value of convertible notes payable on the consolidated statement of operations, therefore no gain or loss on the settlement was recorded.

The Company is currently involved in and may from time to time become involved in various legal actions incidental to our business. As of the date of this report, the Company, other than as set forth above, is not involved in any legal proceedings that it believes could have a material adverse effect on its financial position or results of operations. However, the outcome of any current or future legal proceeding is inherently difficult to predict and any dispute resolved unfavorably could have a material adverse effect on the Company's business, financial position, and operating results.

9. Equity

Common Stock Reverse Stock Split

On March 21, 2024, the Board approved a reverse stock split ratio of 1-for-10. On March 28, 2024, the Company filed an amendment to its certificate of incorporation in the State of Delaware (the "*Amendment*"), which provided that every ten shares of its issued and outstanding Common Stock would automatically be combined into one issued and outstanding share of Common Stock, without any change in the par value per share.

Effective April 1, 2024, every 10 issued and outstanding shares of the Company's Common Stock were converted automatically into one share of the Company's Common Stock, without any change in the par value per share. The Reverse Stock Split reduced the number of shares of Common Stock issued and outstanding from approximately 95.7 million to approximately 9.6 million.

No fractional shares were issued in connection with the Reverse Stock Split. Shareholders who otherwise would have been entitled to receive a fractional share instead became entitled to receive one whole share of Common Stock in lieu of such fractional share. As a result of the Reverse Stock Split, 73,040 additional shares of common stock were issued in lieu of fractional shares. All share and per share amounts in the accompanying condensed consolidated financial statements and footnotes have been retrospectively adjusted for the reverse split.

Preferred Stock

Pursuant to the terms of the Company's Second Amended and Restated Certificate of Incorporation, the Company has 50,000,000 shares of preferred stock with a par value of $0.001, of which 12,000,000 were designated Series A Convertible Preferred Stock (*"Series A Preferred"*). In August 2023, the Company sold and issued 3.0 million shares of Series A Preferred for an aggregate cash purchase price of $1.2 million. During March 2024 holders of the Company's Series A Preferred elected to convert 3,000,000 shares of Series A Preferred into 300,000 shares of Common Stock. As of September 30, 2024, no shares of Series A Preferred remained issued or outstanding.

Common Stock

Pursuant to the terms of the Company's Second Amended and Restated Certificate of Incorporation, the Company has authorized 500,000,000 shares of Common Stock with a par value of $0.001.

On January 2, 2024, the Company issued 143,648 shares of Common Stock as payment for the $0.4 million minimum payment to Streeterville related to principal and interest payments on the Streeterville Note.

From February 20, 2024 to July 29, 2024, the Company announced that it entered into multiple purchase agreements (the "*ATM Purchase Agreements*") subject to standard closing conditions where accredited investors purchased 385,515 shares of unregistered Common Stock at a range of $2.42 – $7.10 per share. On April 15, 2024, the Company increased the maximum aggregate offering amount of the shares of Common Stock issuable under that certain At the Market Offering Agreement, dated August 14, 2023 (the "*Offering Agreement*"), with H.C. Wainwright & Co., and filed a prospectus supplement (the "*Current Prospectus Supplement*") under the Offering Agreement for an aggregate of $4.9 million. Through September 30, 2024, the aggregate net cash proceeds to the Company from the ATM Purchases Agreements were approximately $1.7 million.

On February 29, 2024, the Company entered into a securities purchase agreement with an investor providing for the issuance and sale of 270,000 shares of Common Stock and warrants to purchase up to 270,000 shares of Common Stock (the " *February Warrants*") at a price of $3.80 per share of Common Stock and accompanying warrant, which represents a 26.7% premium to the offering price in February 2024 Public Offering. The Common Stock and the February Warrants were offered pursuant to a private placement (the " *February 2024 Private Placement*") under Section 4(a)(2) of the Securities Act of 1933, as amended (the "*Securities Act*"). The aggregate net cash proceeds to the Company from the February 2024 Private Placement were approximately $1.0 million.

On February 27, 2024, the Company entered into an underwriting agreement (the " *February Underwriting Agreement*") with EF Hutton LLC (the "*Representative*"), as the representative of the several underwriters named therein (the " *February Underwriters*"), relating to an underwritten public offering (the " *February 2024 Public Offering*") of 500,000 shares (the " *February Shares*") of the Company's Common Stock. The public offering price for each share of Common Stock was $3.00 and the February Underwriters purchased the shares of Common Stock pursuant to the February Underwriting Agreement at a price for each share of Common Stock of $2.76. Pursuant to the February Underwriting Agreement, the Company also granted the Representative a 45-day option to purchase up to an additional 75,000 shares (the " *February Option Shares*") of the Common Stock on the same terms as the February Shares sold in the February 2024 Public Offering (the " *February Over-Allotment Option*"). On February 28, 2024, the February 2024 Public Offering closed (the " *February Closing Date*"). The aggregate net cash proceeds to the Company from the February 2024 Offering proceeds were approximately $1.3 million after offering costs of approximately $0.4 million. On March 5, 2024, the February Underwriters of the previously announced underwritten public offering of the Company exercised their option in accordance with the February Underwriting Agreement, dated February 27, 2024, by and between the Company and the Representative, as representative of the several underwriters named therein, to purchase up to an additional 75,000 shares of the Company's Common Stock, at a public offering price of $3.00 per share (the " *February Overallotment Exercise*"). The February Overallotment Exercise closed on March 6, 2024. The aggregate net cash proceeds to the Company from the February Overallotment Exercise were approximately $0.2 million. The Company accrued additional offering costs of approximately $0.2 million.

On April 18, 2024, the Company entered into an underwriting agreement (the " *April Underwriting Agreement*") with the Representative, as the representative of the several underwriters named therein (the " *April Underwriters*"), relating to an underwritten public offering (the " *April 2024 Public Offering*") of 607,000 shares (the "*April Shares*") of Common Stock. The public offering price for each share of Common Stock was $3.30. Pursuant to the April Underwriting Agreement, the Company also granted the Representative a 45-day option to purchase up to an additional 91,050 shares (the " *April Option Shares*") of the Common Stock on the same terms as the April Shares sold in the April 2024 Public Offering (the " *April Over-Allotment Option*"). On April 19, 2024, the Offering closed (the " *April Closing Date*"). Net proceeds from the April 2024 Public Offering were approximately $1.6 million after offering costs of approximately $0.4 million. On May 23, 2024, the April Underwriters of the previously announced underwritten public offering of the Company exercised their option in accordance with the April Underwriting Agreement, dated April 18, 2024, by and between the Company and the Representative, as representative of the several underwriters named therein, to purchase up to an additional 91,050 shares of the Company's Common Stock, at the public offering price of $3.30 per share (the " *April Overallotment Exercise*"). The April Over-Allotment Exercise was exercised in full and closed on May 23, 2024. The net cash proceeds to the Company from the April Overallotment Exercise were approximately $0.2 million which include offering costs of less than $0.1 million.

On August 28, 2024, the Company issued 20,000 shares of Common Stock in relation to consulting services performed by a third party. The fair value of the Common Stock on the date of issuance was less than $0.1 million.

Common Stock Warrants

Substitute Warrants

In connection with the Merger in 2021, each warrant to purchase shares of Common Stock of NRx that was outstanding and unexercised immediately prior to the effective time (whether vested or unvested) was assumed by Big Rock Partners Acquisition Corp. (*"BRPA"*) and converted into a warrant, based on the exchange ratio (of 0.316), that will continue to be governed by substantially the same terms and conditions, including vesting, as were applicable to the former warrant (the "*Substitute Warrants*"). There were 3,792,970 warrants outstanding and unexercised at the effective time. As these Substitute Warrants meet the definition of a derivative as contemplated in FASB ASC Topic 815, based on provisions in the warrant agreement related to the Earnout Shares Milestone and the Earnout Cash Milestone and the contingent right to receive additional shares for these provisions, the Substitute Warrants were recorded as derivative liabilities on the consolidated balance sheet and measured at fair value at inception (on the date of the Merger) and at each reporting date in accordance with FASB ASC Topic 820, with changes in fair value recognized in the statements of operations in the period of change.

The Company recognized a gain on the change in fair value of the Substitute Warrants for the three months ended September 30, 2024 and 2023 of $0 and less than $0.1 million, respectively. The Company recognized a gain on the change in fair value of the Substitute Warrants for the nine months ended September 30, 2024 and 2023 of less than $0.1 million and less than $0.1 million, respectively. Refer to Note 11 for further discussion of fair value measurement of the warrant liabilities.

Assumed Public Warrants

Prior to the Merger, the Company had 3,450,000 warrants outstanding (the "*Public Warrants*") to purchase up to 345,000 shares of Common Stock. Each Public Warrant entitles the holder to purchase one-tenth share of Common Stock at an exercise price of $115 per share. The Public Warrants became exercisable at the effective time of the Merger and expire five years after the effective time on or earlier upon their redemption or liquidation of the Company.

During the three and nine months ended September 30, 2024 and 2023 no Public Warrants were exercised. The outstanding balance of these public warrants remains in equity. At September 30, 2024 and December 31, 2023, there were 3,448,856 Public Warrants outstanding to purchase up to 344,886 shares of Common Stock.

Assumed Private Placement Warrants

Prior to the Merger, the Company had outstanding 136,250 Private Placement Warrants (the "*Private Placement Warrants*") to purchase up to 13,625 shares of Common Stock. The Private Placement Warrants are not indexed to the Company's common shares in the manner contemplated by FASB ASC Topic 815-40-15 because the holder of the instrument is not an input into the pricing of a fixed-for-fixed option on equity shares. The Company classifies the Private Placement Warrants as derivative liabilities in its condensed consolidated balance sheets as of September 30, 2024 and December 31, 2023. The Company measures the fair value of the Private Placement Warrants at the end of each reporting period and recognizes changes in the fair value from the prior period in the Company's statements of operations for the current period.

The Company recognized a gain on the change in fair value of the Private Placement Warrants for the three months ended September 30, 2024 and 2023 of less than $0.1 million and less than $0.1 million, respectively. The Company recognized a gain on the change in fair value of the Private Placement Warrants for the nine months ended September 30, 2024 and 2023 of less than $0.1 million and less than $0.1 million, respectively. Refer to Note 11 for discussion of the fair value measurement of the Company's warrant liabilities.

Investor Warrants

As discussed above, on February 28, 2024, in conjunction with the sale of 270,000 shares of the Company's Common Stock, the Company issued February Warrants to purchase up to 270,000 shares of Common Stock which were classified in stockholder's equity. The February Warrants have an exercise price of $3.80 per share, are initially exercisable beginning six months following the date of issuance, and will expire five years from the date of issuance. The measurement of fair value was determined utilizing a Black-Scholes model considering all relevant assumptions current at the date of issuance (i.e., share price of $3.59, exercise price of $3.80, term of 5 years, volatility of 178.10%, risk-free rate of 4.26%, and expected dividend rate of 0%). The allocated fair value of the February Warrants on the grant date was $0.5 million and is recorded within additional paid-in capital.

On February 28, 2024, the Company issued to the Representative the Underwriter's Warrant to purchase up to 25,000 shares of Common Stock (the " *February Underwriter Warrant Shares*"). The Underwriter's Warrant is exercisable six months following the date of the Underwriting Agreement and terminates on the five-year anniversary of the date of the Underwriting Agreement. The measurement of fair value was determined utilizing a Black-Scholes model considering all relevant assumptions current at the date of issuance (i.e., share price of $3.05, exercise price of $3.30, term of 5 years, volatility of 178.10%, risk-free rate of 4.26%, and expected dividend rate of 0%). The allocated fair value of the Underwriter's Warrants on the grant date was $0.1 million and is recorded as a charge to additional paid-in capital.

On March 5, 2024 the Company issued Underwriter's Warrant to purchase up to 3,750 shares of Common Stock in relation to the exercise of the February Over-Allotment Option. The measurement of fair value was determined utilizing a Black-Scholes model considering all relevant assumptions current at the date of issuance (i.e., share price of $3.05, exercise price of $3.30, term of 5 years, volatility of 178.10%, risk-free rate of 4.12%, and expected dividend rate of 0%). The allocated fair value of the Underwriter's Warrants on the grant date was less than $0.1 million and is recorded as a charge to additional paid-in capital.

On April 19, 2024, the Company issued to the Representative the April Underwriter's Warrant to purchase up to 30,350 shares of Common Stock (the " *April Underwriter Warrant Shares*"). The April Underwriter's Warrant is exercisable six months following the date of the Underwriting Agreement and terminates on the five-year anniversary of the date of the Underwriting Agreement. The measurement of fair value was determined utilizing a Black-Scholes model considering all relevant assumptions current at the date of issuance (i.e., share price of $3.04, exercise price of $3.63, term of 5 years, volatility of 178.10%, risk-free rate of 4.66%, and expected dividend rate of 0%). The allocated fair value of the April Underwriter's Warrant on the grant date was less than $0.1 million and is recorded as a charge to additional paid-in capital.

On May 23, 2024 the Company issued Underwriter's Warrant to purchase up to 4,553 shares of Common Stock in relation to the exercise of the April Over-Allotment Option. The measurement of fair value was determined utilizing a Black-Scholes model considering all relevant assumptions current at the date of issuance (i.e., share price of $3.62, exercise price of $3.63, term of 5 years, volatility of 178.10%, risk-free rate of 4.52%, and expected dividend rate of 0%). The allocated fair value of the Underwriter's Warrants on the grant date was less than $0.1 million and is recorded as a charge to additional paid-in capital.

Alvogen Warrants

In conjunction with the amended Alvogen licensing agreement discussed in Note 6, on February 7, 2024 the Company issued warrants to purchase up to 419,598 shares of Common Stock. The warrants have an exercise price of $4.00 per share, are exercisable immediately following the date of issuance, will expire three years from the date of issuance, and may also be exercised on a cashless basis if there is no effective registration statement available for the resale of the shares of Common Stock underlying the warrants. The warrants are subject to a beneficial ownership limitation of 4.99% post-exercise, with the exception that the beneficial ownership limitation may be waived up to a maximum of 9.99% at the election of the holder, with not less than 61 days prior notice. The measurement of fair value was determined utilizing a Black-Scholes model considering all relevant assumptions current at the date of issuance (i.e., share price of $4.10, exercise price of $4.00, term of 3 years, volatility of 138.0%, risk-free rate of 4.2%, and expected dividend rate of 0.0%). The fair value of the warrants on the grant date was $1.3 million and was recorded within additional paid-in capital as of March 31, 2024. Upon termination of the Alvogen Agreement on June 21, 2024, the offsetting amount recorded within additional paid-in capital as an unfunded stock subscription receivable was expensed to research and development.

Anson Warrants

The Anson Warrants, originally issued in the Purchase Agreement, are recognized as derivative liabilities in accordance with ASC 815. The Company concluded liability classification was appropriate as certain settlement features included in the Anson Warrants are not indexed to the Company's own stock, and therefore preclude equity classification. Accordingly, the Company recognizes the warrant instruments as liabilities at fair value and adjusts the instruments to fair value at each reporting period. The liabilities are subject to re-measurement at each balance sheet date until exercise or expiration, and any change in fair value is recognized in the Company's condensed consolidated statements of operations. The Anson Warrants were initially measured at fair value using a Black-Scholes model and have subsequently been measured based on the listed market price of such warrants. Warrant liabilities are classified as current liabilities on the Company's condensed consolidated balance sheets. On August 14, 2024, in conjunction with the issuance of the First Tranche Notes, the Company issued warrants to purchase up to 1,349,305 shares of the Company's Common Stock which were classified as a liability. The warrants have an exercise price of $2.4168 per share and have a contractual term of five years expiring on August 14, 2029. The measurement of fair value of the Investor Warrants were determined utilizing a Black-Scholes model considering all relevant assumptions current at the date of issuance (i.e., share price of $1.86, exercise price of $2.42, term of five years, volatility of 122%, and risk-free rate of 3.67%, and expected dividend rate of 0%). The grant date fair value of these Investor Warrants was estimated to be $2.1 million on August 14, 2024. As of September 30, 2023, the fair value of the Anson Warrants was $1.9 million. Refer to Note 11 for further discussion of fair value measurement of the warrant liabilities.

	Total Warrant Shares	Weighted Average Remaining Term	Weighted Average Exercise Price	Aggregate Intrinsic Value (in thousands)

Outstanding as of December 31, 2023	3,321,499	3.91	$ 23.01	$ 180
Issued	718,348			
Expired	(5,510)			
Outstanding as of March 31, 2024	4,034,337	3.68	19.61	807
Issued	34,903			
Outstanding as of June 30, 2024	4,069,240	3.44	$ 19.47	$ —
Issued	1,349,305			
Expired	(90,909)			
Outstanding as of September 30, 2024	5,327,636	3.67	$ 13.39	$ —

10. Stock-Based Compensation

2016 Omnibus Incentive Plan

Prior to the Merger, NRx maintained its 2016 Omnibus Incentive Plan (the "*2016 Plan*"), under which NeuroRx granted incentive stock options, restricted stock awards, other stock-based awards, or other cash-based awards to employees, directors, and non-employee consultants. The maximum aggregate shares of Common Stock that were subject to awards and issuable under the 2016 Plan was 347,200.

In connection with the Merger, each option of NeuroRx that was outstanding and unexercised immediately prior to the Effective Time (whether vested or unvested) was assumed by BRPA and converted into an option to acquire an adjusted number of shares of Common Stock at an adjusted exercise price per share, based on the Exchange Ratio (of 0.316:1).

Upon the closing of the Merger, the outstanding and unexercised NeuroRx stock options became options to purchase an aggregate 289,542 shares of the Company's Common Stock at an average exercise price of $51.00 per share.

2021 Omnibus Incentive Plan

As of September 30, 2024, 955,281 shares of Common Stock are authorized for issuance pursuant to awards under the Company's 2021 Omnibus Incentive Plan (the "*2021 Plan*"). As of January 1, 2024, 83,920 shares were added to the 2021 Plan under an evergreen feature that automatically increases the reserve with additional shares of Common Stock for future issuance under the Incentive Plan each calendar year, beginning January 1, 2022 and ending on and including January 1, 2031, equal to the lesser of (A) 1% of the shares of Common Stock outstanding on the final day of the immediately preceding calendar year or (B) a smaller number of shares determined by the Board. On December 28, 2023 the first amendment to the 2021 Omnibus Plan was executed which increased the maximum number of shares (i) available for issuance under the Plan, by an additional 200,000 shares, and (ii) that may be delivered pursuant to the exercise of Incentive Stock Options granted under the Plan to be equal to 100% of the Share Pool. As of September 30, 2024, an aggregate 585,099 shares have been awarded net of forfeitures, and 370,182 shares remain available for issuance under the 2021 Plan. The 2021 Plan permits the granting of incentive stock options, restricted stock awards, other stock-based awards or other cash-based awards to employees, directors, and non-employee consultants.

Option Awards

The fair value of each employee and non-employee stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company is a public company and has limited company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the limited company-specific historical volatility and implied volatility. The expected term of the Company's stock options for employees has been determined utilizing the "simplified" method for awards. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve. Expected dividend yield is zero based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future. Additionally, certain options granted contain terms that require all unvested options to immediately vest a) upon the approval of an NDA by the FDA for NRX-101, or b) immediately preceding a change in control of the Company, whichever occurs first.

The Company issued no stock options during the three or nine months ended September 30, 2024.

The following table summarizes the Company's employee and non-employee stock option activity under the 2021 Plan for the following periods:

	Number of shares	Weighted average exercise price	Weighted average remaining contractual life (in years)	Aggregate intrinsic value (in thousands)
Outstanding as of December 31, 2023	264,983	$ 18.30	7.7	$ 75
Expired/Forfeited	(89,546)			
Outstanding as of March 31, 2024	175,437	$ 18.60	8.4	$ 40
Expired/Forfeited	(14,000)			
Outstanding as of June 30, 2024	161,437	$ 21.18	7.5	$ —
Expired/Forfeited	(29,604)			
Outstanding as of September 30, 2024	131,833	$ 21.01	7.4	$ —
Options vested and exercisable as of September 30, 2024	109,399	$ 24.13	7.1	$ —

Stock-based compensation expense related to stock options was $0.1 million and $0.4 million for the three and nine months ended September 30, 2024, respectively.

At September 30, 2024, the total unrecognized compensation related to unvested employee and non-employee stock option awards granted, was $0.1 million, which the Company expects to recognize over a weighted-average period of approximately 0.9 years.

Restricted Stock Awards

The following table presents the Company's Restricted Stock Activity:

	Awards	Weighted Average Grant Date Fair Value
Balance as of December 31, 2023 (unvested)	124,166	$ 5.20
Vested	(57,500)	4.64
Balance as of March 31, 2024 (unvested)	66,666	5.66
Vested	—	—
Balance as of June 30, 2024 (unvested)	66,666	5.66
Vested	(33,333)	2.08
Balance as of September 30, 2024 (unvested)	33,333	$ 5.66

On July 12, 2022, the Board granted an award of 100,000 restricted shares of the Company ("*RSAs*") as an inducement to the newly appointed CEO, pursuant to a separate Restricted Stock Award Agreement. The RSAs will vest in approximately equal installments over three (3) years from the grant date, subject to continued service through the applicable vesting date.

On December 28, 2023, the Company was authorized to grant 57,500 RSAs to a consultant for services provided. The RSAs vested after six months from September 4, 2023, the date the services began. The shares were valued on the grant date based on the quoted price of $4.60 or approximately $0.3 million which was amortized over the vesting term.

Stock-based compensation expense related to RSAs was less than $0.1 million for the three and nine months ended September 30, 2024 respectively.

Subsequent to September 30, 2024, the Company's CEO announced his resignation and as a result, all unvested RSAs were forfeited. Accordingly, the Company does not expect to recognize any further stock-based compensation expense for the balance of unvested RSAs as of September 30, 2024.

The following table summarizes the Company's recognition of stock-based compensation for the following periods (in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
	(Unaudited)			
Stock-based compensation expense				
General and administrative	$ 82	$ 261	$ 365	$ 1,295
Research and development	22	90	78	295
Total stock-based compensation expense	$ 104	$ 351	$ 443	$ 1,590

11. Fair Value Measurements

Fair value measurements discussed herein are based upon certain market assumptions and pertinent information available to management as of and during the three and nine months ended September 30, 2024 and 2023. The carrying amount of accounts payable approximated fair value as they are short term in nature. The fair value of stock options and warrants issued for services are estimated based on the Black-Scholes model. The fair value of the convertible notes payable was estimated utilizing a Monte Carlo simulation.

Fair Value on a Recurring Basis

The Company follows the guidance in ASC 820 for its financial assets and liabilities that are re-measured and reported at fair value at each reporting period, and non-financial assets and liabilities that are re-measured and reported at fair value at least annually. The estimated fair value of the money market account represents a Level 1 measurement. The estimated fair value of the warrant liabilities and convertible note payable represent Level 3 measurements. The following table presents information about the Company's assets and liabilities that are measured at fair value on a recurring basis at September 30, 2024 and December 31, 2023, and indicates the fair value hierarchy of the valuation inputs the Company utilized to determine such fair value (in thousands):

Description	Level	September 30, 2024	December 31, 2023
Assets:		(Unaudited)	
Money Market Account	1	$ 481	$ 3,874
Liabilities:			
Warrant liabilities (Note 9)	3	$ 1,902	$ 17
Convertible note payable - Streeterville (Note 7)	3	$ 3,050	$ 9,161
Convertible note payable - Anson (Note 7)	3	$ 2,985	$ —

Convertible Note Payable - Streeterville

The significant inputs used in the Monte Carlo simulation to measure the Streeterville note liability that is categorized within Level 3 of the fair value hierarchy are as follows:

	September 30, 2024	September 30, 2023
Stock price on valuation date	*	$ 2.60
Time to expiration	*	0.59
Note market interest rate	*	8.9%
Equity volatility	*	90.0%
Volume volatility	*	365.0%
Risk-free rate	*	5.52%
Probability of default	*	3.2%

*As of September 30, 2024, the fair value was determined to be $3.1 million, reflecting the remaining obligation post-settlement. Given the short interval between the valuation dates, the impact on the fair value was deemed immaterial.

The following table sets forth a summary of the changes in the fair value of the Streeterville Note categorized within Level 3 of the fair value hierarchy (in thousands):

Fair value of the Note as of December 31, 2023	$	9,161
Conversions and repayments of principal and interest (cash)		(2,300)
Conversions and repayments of principal and interest (shares)		(400)
Fair value adjustment through earnings		318
Fair value of the Note as of March 31, 2024		6,779
Fair value adjustment through earnings		23
Default penalty		849
Fair value of the Note as of June 30, 2024	$	7,651
Conversions and repayments of principal and interest (cash)		(2,500)
Fair value adjustment through earnings		(2,101)
Fair value of the Note as of September 30, 2024	$	3,050
Convertible note payable - current portion	$	3,050
Convertible note payable, net of current portion	$	—
Fair value of the Note as of December 31, 2022	$	10,525
Fair value adjustment through earnings		1,770
Fair value adjustment through accumulated other comprehensive loss		(106)
Fair value of the Note as of March 31, 2023		12,189
Conversions and repayments of principal and interest (cash)		(88)
Conversions and repayments of principal and interest (shares)		(200)
Fair value adjustment through earnings		663
Fair value adjustment through accumulated other comprehensive loss		128
Fair value of the Note as of June 30, 2023	$	12,692
Conversions and repayments of principal and interest (cash)		(2,200)
Conversions and repayments of principal and interest (shares)		(782)
Fair value adjustment through earnings		359
Fair value of the Note as of September 30, 2023	$	10,069
Convertible note payable - current portion	$	10,069
Convertible note payable, net of current portion	$	—

Convertible Note Payable - Anson

The significant inputs used in the Monte Carlo simulation to measure the Anson note liability that is categorized within Level 3 of the fair value hierarchy are as follows:

		September 30, 2024
Stock price on valuation date	$	1.69
Time to expiration		1.12
Note market interest rate		12.5%
Equity volatility		122.0%
Risk-free rate		3.94%
Probability of default		33.6%

The following table sets forth a summary of the changes in the fair value of the Anson Note categorized within Level 3 of the fair value hierarchy (in thousands):

Fair value of the Note at issuance	$	2,941
Conversions and repayments of principal and interest (shares)		(702)
Fair value adjustment through earnings		746
Fair value of the Note as of September 30, 2024	$	2,985
Convertible note payable - current portion	$	—
Convertible note payable, net of current portion	$	2,985

Warrant Liabilities

The Company utilizes a Black-Scholes model approach to value its liability-classified warrants at each reporting period, with changes in fair value recognized in the consolidated statements of operations. The estimated fair value of the warrant liabilities is determined using Level 3 inputs. There were no transfers between levels within the fair value hierarchy during the periods presented. Inherent in a Black Scholes options pricing model are assumptions related to expected share-price volatility, expected life, risk-free interest rate and dividend yield. The Company estimates the volatility of its Common Stock based on historical volatility that matches the expected remaining life of the warrants. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the warrants. The expected life of the warrants is assumed to be equivalent to their remaining contractual term. The dividend rate is based on the historical rate, which the Company anticipates remaining at zero.

The weighted-average significant inputs used in the Black-Scholes model to measure the warrant liabilities that are categorized within Level 3 of the fair value hierarchy are as follows:

	September 30,			
	2024		**2023**	
Stock price on valuation date	$	1.69	$	6.60
Exercise price per share	$	3.55	$	115.00
Expected life		4.84		3.15
Volatility		129.8%		175.1%
Risk-free rate		3.6%		5.3%
Dividend yield		0.0%		0.0%
Fair value of warrants	$	1.40	$	7.93

A reconciliation of warrant liabilities is included below (in thousands):

Balance as of December 31, 2023	$ 17
Loss upon re-measurement	9
Balance as of March 31, 2024	26
Gain upon re-measurement	(18)
Balance as of June 30, 2024	$ 8
Initial recognition of issuance of warrants	2,059
Gain upon re-measurement	(165)
Balance as of September 30, 2024	$ 1,902

Balance as of December 31, 2022	$ 37
Gain upon re-measurement	(12)
Balance as of March 31, 2023	25
Loss upon re-measurement	11
Balance as of June 30, 2023	$ 36
Loss upon re-measurement	(26)
Balance as of September 30, 2023	$ 10

12. Income Taxes

The Company recorded no provision or benefit for income tax expense for the nine months ended September 30, 2024 and 2023, respectively.

For all periods presented, the pretax losses incurred by the Company received no corresponding tax benefit because the Company concluded that it is more likely than not that the Company will be unable to realize the value of any resulting deferred tax assets. The Company will continue to assess its position in future periods to determine if it is appropriate to reduce a portion of its valuation allowance in the future.

The Company has no open tax audits with any taxing authority as of September 30, 2024.

13. Related Party Transactions

Glytech Agreement

The Company licenses patents that are owned by Glytech, LLC ("*Glytech*"), pursuant to a license agreement (the "*Glytech Agreement*"). Glytech is owned by Daniel Javitt, a co-founder and former director of the Company. The Glytech Agreement requires that the Company pay Glytech for ongoing scientific support and also reimburse Glytech for expenses of obtaining and maintaining patents that are licensed to the Company. During both the three months ended September 30, 2024 and 2023, the Company paid Glytech zero and $0.1 million, respectively, for continuing technology support services and reimbursed expenses. During the nine months ended September 30, 2024 and 2023, the Company paid Glytech $0.3 million and $0.2 million, respectively, for continuing technology support services and reimbursed expenses. These support services are ongoing.

The Fourth Amendment to the Glytech Agreement, effective as of December 31, 2020, includes an equity value-triggered transfer of Excluded Technology from Glytech to the Company. The Excluded Technology is defined in the Glytech Agreement as any technology, and any know-how related thereto, covered in the licensed patents that do not recite either D-cycloserine or lurasidone individually or jointly. This definition would cover pharmaceutical formulations, including some that the Company considers "pipeline" or "future product" opportunities, that contain a combination of pharmaceutical components different from those contained in NRX-100 and NRX-101. On November 6, 2022 the Glytech Agreement was amended whereby Glytech agreed to transfer and assign the remainder of the Licensed Technology and the Excluded Technology to the Company for no additional consideration at any time upon receipt of written notice from the Company if, on or prior to March 31, 2024, (i) the value of the Glytech equity holdings in the Company (the "*Glytech Equity*") has an aggregate liquidity value of at least $50 million for twenty (20) consecutive trading days immediately preceding any given date and (ii) there are no legal or contractual restrictions on selling all of the securities represented by the Glytech Equity then applicable to Glytech (or reasonably foreseeable to be applicable to Glytech within the following twenty trading days). The option was not exercised and expired on March 31, 2024.

Consulting Agreement with Dr. Jonathan Javitt

The Chief Scientist of the Company, Dr. Jonathan Javitt, is a major shareholder in the Company and is the Chairman of the Board of Directors. Therefore, the services provided to the Company are deemed to be a related party transaction. He served the Company on a full-time basis as CEO under an employment agreement with the Company until March 8, 2022 and currently serves under a Consulting Agreement with the Company as Chief Scientist and interim CEO and received compensation of $0.2 million during both the three months ended September 30, 2024 and 2023, and $0.2 million and $0.7 million during the nine months ended September 30, 2024 and 2023, respectively.

On March 29, 2023, the Consulting Agreement dated March 8, 2022 between the Company and Dr. Jonathan Javitt was amended to extend the term of the Agreement until March 8, 2024 with automatic annual renewals thereafter unless one party or the other provides notice of non-renewal (the "*Javitt Amendment*"). The Javitt Amendment also provided for payment at the rate of $0.6 million per year, payable monthly (i.e., less than $0.1 million per month), and a performance-based annual bonus with a minimum target of $0.3 million, at the discretion of the Board and upon satisfactory performance of the services. The annual discretionary bonus for 2023, if any, may be approved by the Board in 2024 and if paid, will be pro-rated from the start of the extension period and is subject to Dr. Javitt's continued engagement by the Company. As of September 30, 2024 and December 31, 2023, the annual discretionary bonus of $0.3 million and $0.2 million is accrued and included within accrued and other current liabilities on the condensed consolidated balance sheets, respectively.

The Javitt Amendment also provides, subject to the approval of the Board of Directors, for a grant of 50,000 shares of restricted stock of the Company under the Company's 2021 Omnibus Incentive Plan. The restrictions are performance based, and half of the restricted shares (25,000) shall have the restrictions removed on the New Drug Application Date (as defined below) and the remaining half (25,000) will have the restrictions removed on the New Drug Approval Date (as defined below). As of September 30, 2024, the Board of Directors has not approved the grant of restricted stock.

The term "New Drug Application Date" means the date upon which the FDA files the Company's new drug application for the Antidepressant Drug Regimen (as defined below) for review. The term "New Drug Approval Date" means date upon which the FDA has both approved the Company's Antidepressant Drug Regimen and listed the Company's Antidepressant Drug Regimen in the FDA's "Orange Book". The term "Antidepressant Drug Regimen" means NRX-101, a proprietary fixed-dose combination capsule of d-cycloserine and Lurasidone, administered for sequential weeks of daily oral treatment following patient stabilization using a single infusion of NRX-100 (ketamine) or another standard of care therapy.

Consulting Agreement with Zachary Javitt

Zachary Javitt is the son of Dr. Jonathan Javitt. Zachary Javitt provides services related to website, IT, and marketing support under the supervision of the Company's CEO who is responsible for assuring that the services are provided on financial terms that are at market. The Company paid this family member a total of less than $0.2 million and $0.1 million, respectively, during the three and nine months ended September 30, 2024 and 2023, respectively. These services are ongoing.

Included in accounts payable were less than $0.1 million due to the above related parties as of September 30, 2024 and December 31, 2023, respectively.

14. Subsequent Events

Anson Convertible Note

Pursuant to the Purchase Agreement, on October 10, 2024 (the "Second Closing Date"), the Company sold a total of (y) $5.435 million in Notes (the "Second Tranche Notes", and collectively with the First Tranche Notes, the ("Anson Notes")), with an aggregate purchase price of approximately $5.0 million, and (z) Warrants to purchase up to 1,846,128 shares of Common Stock (the "Second Closing"). The Second Tranche Notes are convertible into Common Stock, at a per share conversion price equal to by the lower of (a) $1.7664, (the "Fixed Conversion Price") or (b) a price equal to 92% of the lowest VWAP during the seven trading day period immediately preceding the effective date set forth in a Notice of Conversion (as defined in the Second Tranche Notes) (each, a "Conversion Date") delivered by an Investor to the Company (the "Alternate Conversion Price", and together with the Fixed Conversion Price, the "Conversion Price"). The Conversion Price is subject to, among other customary provisions, downward adjustment in the event of any future issuance by the Company of Common Stock (or Common Stock Equivalents (as defined in the Second Tranche Notes)) below the then effective Conversion Price. $3.05 million of the note proceeds were used to repay the Streeterville note.

In connection with the above offering, the Company engaged Placement Agent. Pursuant to the terms of the engagement with the Placement Agent, the Company paid a cash fee of 7% of the gross proceeds the Company received in the Second Closing and incurred certain additional other issuance costs, for aggregate issuance costs of approximately $0.4 million. The Company also agreed to reimburse the Placement Agent at the Second Closing for expenses incurred, including disbursements of legal counsel, in an amount not to exceed of $50,000.

Anson Conversion Notices

From October 22, 2024 to October 31, 2024, the Company received conversion notices from Anson resulting in the conversion of $0.8 million of principal and interest from the Anson Notes into 754,152 shares of Common Stock.

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

You should read the following discussion and analysis of NRx Pharmaceuticals' financial condition and plan of operations together with NRx Pharmaceuticals' condensed consolidated financial statements and the related notes appearing elsewhere herein. In addition to historical information, this discussion and analysis contains forward looking statements that involve risks, uncertainties and assumptions. NRx Pharmaceuticals' actual results may differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section entitled "Risk Factors" included elsewhere herein. All references to "Note," followed by a number reference from 1 to 14 herein, refer to the applicable corresponding numbered footnotes to these condensed consolidated financial statements.

Overview

NRx Pharmaceuticals, Inc. (Nasdaq: NRXP) ("*NRX*" or the "*Company*") is a clinical-stage bio-pharmaceutical company which develops and will distribute, through its wholly-owned operating subsidiaries, NeuroRx, Inc., ("*NeuroRx*") and HOPE Therapeutics, Inc. ("*HOPE*"), novel therapeutics for the treatment of central nervous system disorders including suicidal depression, chronic pain, and post-traumatic stress disorder ("*PTSD*") and now schizophrenia. All of our current drug development activities are focused drugs that modulate on the N-methyl-D-aspartate ("*NMDA*") receptor in the brain and nervous system, a neurochemical pathway that has been disclosed in detail in our annual filings. NeuroRx is organized as a traditional research and development ("*R&D*") company, whereas HOPE is organized as a specialty pharmaceutical company intended to distribute ketamine and other therapeutic options to clinics that serve patients with suicidal depression and PTSD. The Company has two lead drug candidates that are expected to be submitted by year end for Food and Drug Administration ("*FDA*") approval with anticipated FDA decision dates under the Prescription Drug User Fee Act ("*PDUFA*") by the end of June 2025: NRX-101, an oral fixed dose combination of D-cycloserine and lurasidone and NRX-100, a preservative-free formulation of ketamine for intravenous infusion. In February 2024, the Company incorporated HOPE as a wholly-owned subsidiary and in August 2024 completed an audit of HOPE's financial statements necessary for the intended Spin-Off (as defined in above) of HOPE to the Company's shareholders at a future date.

During the third quarter of 2024 and in the subsequent period, the Company has achieved the following:

- We consummated a financing agreement with an institutional investors for up to $16.3 million in debt capital, sufficient to finance the submission of New Drug Applications for NRX-100 and NRX-101.

- We settled litigation with Streeterville Capital, LLC at a substantial discount to the amounts claimed, thereby clearing the path to proposed partial spin-off of HOPE, our wholly-owned subsidiary, to our shareholders.

- We recorded positive data from a Phase 2b/3 trial of NRX-101 in Suicidal Bipolar Depression, demonstrating significant reduction of akathisia (P=0.025) and significant improvement in time to resolution of suicidality (P<.05), while demonstrating comparable antidepressant efficacy to standard of care. Akathisia is a potentially lethal side effect of all serotonin-targeted antidepressants and is associated with suicide.

- The above findings of reduced suicidality and akathisia confirm the results of the Company's prior STABIL-B trial in acutely suicidal patients and also mirror the results of an independent published trial;

- The Company plans to file a New Drug Application ("*NDA*") in Q4 2024 for Accelerated Approval under Breakthrough and Priority Review of NRX-101 in treatment of bipolar depression in people at risk of akathisia, based on the Phase 2b/3 and STABIL-B data. Three manufacturing lots are now completed with more than 12 months of room temperature shelf-stability. The anticipated PDUFA date for this application is prior to June 30, 2025;

- The Company additionally plans to file an NDA in Q4 2024 for Approval under Fast Track Designation and Priority Review for NRX-100 (preservative-free sterile ketamine) in a tamper-resistant, diversion resistant packaging presentation. Ketamine efficacy data are in hand from 4 clinical trials. Three manufacturing lots are now completed with 9 months of stability anticipated by October 30, 2024. The anticipated PDUFA date for this settlement is prior to June 30, 2025. The Company believed that the preservative-free feature of this presentation will be deemed of benefit to patients because of the known toxicity of benzanthonium choloride used to preserve the current commercial formulations of ketamine used for anesthesia

- We developed a novel, patentable pH neutral formulation for ketamine (designed as HTX-100) that will be suitable for both intravenous and subcutaneous administration. Initial laboratory lots demonstrate shelf stability and ongoing stability is being assessed. Ketamine in its current commercial presentations cannot be administered subcutaneously because of its high acidic (pH 3.5-4.0) properties, an acidity range that is known to cause paid and skin ulcers;

- We have completed the audit for HOPE, thereby facilitating the proposed Spin-Off. We have partnered with representatives of ketamine clinic operators to construct a care platform that will include ketamine, operational support, and digital therapeutic extensions. In advance of FDA approval, HOPE is supplying ketamine under 503b pharmacy licensure to meet the national ketamine shortage declared by FDA;

- Signed non-binding letters of intent to acquire two precision psychiatry centers for HOPE Therapeutics for which we are in the process of due diligence. Entered into negotiation with four additional precision psychiatry centers with the intention of assembling a network delivering $25 million or more in ketamine-based precision psychiatric treatment for suicidal depression by year-end 2024.

- NRX-101 in the treatment of Complicated Urinary Tract Infection ("*cUTI*") granted Qualified Infectious Disease Product ("*QIDP*"), Fast Track, and Priority Review designations. Company has now demonstrated that NRX-101 does not damage the microbiome of the gut, in contrast to all other advanced antibiotics and is less likely to cause *C. Difficile* infection (a potentially lethal side effect of antibiotic treatment). NRx is reviewing partnership options: and

- Executed Memorandum of Understanding with Foundation FundaMental for rights to develop potential disease modifying drug for schizophrenia. If successful, this would represent the first drug to reverse the underlying disease mechanism of schizophrenia, rather than simply treating symptoms.

Development of NRX-101 for Suicidal Treatment-Resistant Suicidal Bipolar Depression

On May 5, 2024, the Company announced final data from the recently completed phase 2b/3 trial of NRX-101 in suicidal bipolar depression, with a significantly improved safety profile as demonstrated by a statistically significant reduction in akathisia, an adverse event considered by many experts to be a precursor to suicide. Given the vital need for safer medications in this at-risk population, we plan to submit an NDA to the US FDA for treatment of bipolar depression patients at risk of akathisia, based on these data as well as additional data from our STABIL-B trial.

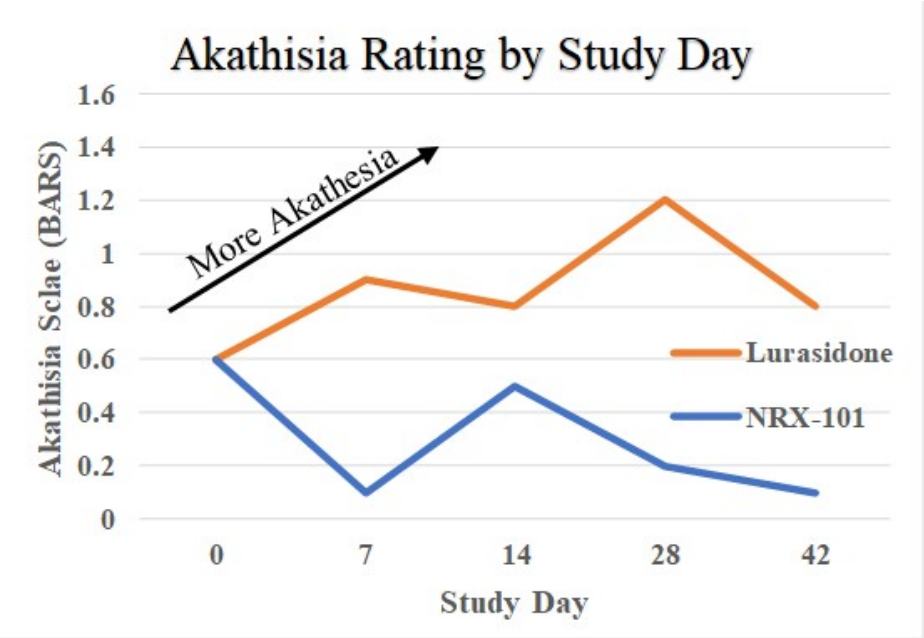
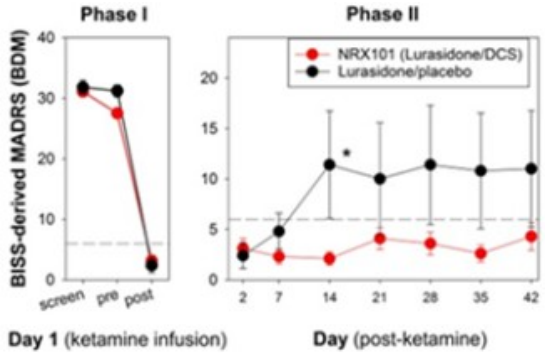


Figure 1: Akathisia rating by study day: A consistent effect is seen commencing at the first post-randomization visit and continued throughout the study (Mixed Model Repeated Measures Regression Effect size =.37; P=0.025).

Trial participants had identical mean scores on the BARS at baseline with subsequent decrease in the NRX-101 treated group versus an increase in the lurasidone-treated group, yielding a 76% relative mean difference between the groups. The difference was apparent at the first post-randomization visit and continued throughout the trial. (Fig 1) Over the 42 days of observation, an effect size of .37 was identified with a statistically significant P value of 0.025 on the Mixed Model for Repeated Measures methodology agreed to with FDA in the 2018 Special Protocol Agreement. Akathisia as ascertained by a 1 point increase in the BARS was seen in 11% of participants randomized to lurasidone (comparable to previous reports in the literature) and seen in only 2% of those treated with NRX-101, an akathisia level that was previously reported for the placebo arm of the lurasidone registration trial.

Akathisia was a prespecified key safety endpoint of the Company's clinical trial. Hence this finding is not a "post-hoc" observation. As previously noted, this clinical trial of 91 participants with suicidal bipolar depression who were not pre-treated with ketamine demonstrated that NRX-101 and lurasidone were comparable in their antidepressant effect. A 33% but statistically non-significant sustained decrease in suicidality was also seen favoring NRX-101. As noted above, improved antidepressant efficacy is not required to seek drug accelerated drug approval based on a statistically-significant safety benefit.

The results released on May 24 are consistent with and amplify the results of the Company's previously published STABIL-B trial (Fig 2 below). In both trials a meaningful reduction in Akathisia was seen, which was statistically significant in the current trial (P<.025) and near significant (P=0.11) in the STABIL-B with similar effect sizes The STABIL-B additionally demonstrated a statistically-significant reduction in suicidality on the Columbia Suicide Severity Rating Scale (C-SSRS).



	Efficacy Measures: Repeated Measures Mixed Model LS Mean Differences							
	Through Day 28				Through Day 42			
	LOCF No		LOCF yes		LOCF No		LOCF yes	
MADRS Depression	LS Mean Δ	p-value	LS Mean Δ	p-value	LS Mean Δ	p-value	LS Mean Δ	p-value
Score	-4.0	0.09	-7.7	0.03	-3.7	0.04	-7.7	0.04
Suicidality Rating	LS Mean Δ	p-value	LS Mean Δ	p-value	LS Mean Δ	p-value	LS Mean Δ	p-value
Scale C-SSRS	-0.5	NS	-1.3	0.04	-0.6	NS	-1.5	0.02
Clinical Global	LS Mean Δ	p-value	LS Mean Δ	p-value	LS Mean Δ	p-value	LS Mean Δ	p-value
Impression CGI-SS	-0.4	NS	-2.9	0.05	-0.6	NS	-2.9	0.02

1 Nierenberg A, Lavin P, Javitt DC, et. al. NRX-101 vs lurasidone for the maintenance of initial stabilization after ketamine in patients with severe bipolar depression with acute suicidal ideation and behavior; a randomized prospective phase 2 trial. Int J Bipolar Dis 2023;11:28-38, doi.org/10.1186/s40345-023-00308-5.

Reduced suicidality associated with the administration of D-cycloserine has additionally been demonstrated by Chen and Coworkers.

Figure 2: Results from published STABIL-B Trial

Incorporation of HOPE Therapeutics and progress towards an NDA for HTX-100 (IV ketamine) in the treatment of suicidal depression

In the first quarter of fiscal 2024, the Company incorporated HOPE Therapeutics as a wholly-owned subsidiary and engaged its auditors who in August 2024 completed an audit of its financial statements which will be necessary for the intended spin-off of HOPE to the Company's shareholders. Intravenous ketamine has now become a standard of care for acute treatment of suicidal depression, in the absence of an FDA-labeled product. Intranasal Esketamine is approved by the FDA (SPRAVATO®), but has not demonstrated a benefit on suicidality and is not approved for use in patients with bipolar depression. Attempts to use intranasal racemic ketamine for suicidal depression have failed.

The Company has formed data-sharing partnerships to license clinical trial data from a French Government-funded trial and two National Institute of Health (NIH)-funded trials all of which demonstrate efficacy of racemic Intravenous ketamine against depression and two of which demonstrate statistically significant benefit vs suicidality. The Company's role is to reformat these data into the required presentation required for review by the FDA.

In contrast to nasal ketamine, Intravenous racemic ketamine demonstrates dramatic and immediate reduction of suicidality in patients with both Major Depressive Disorder and Bipolar Depression. Grunebaum and colleagues demonstrated a rapid and statistically significant reduction in Suicidal Ideation at day 1 ($p=0.0003$) and in depression ($P=0.0234$), as measured by the Profile of Mood States among patients randomized to IV Ketamine compared to those randomized to midazolam. This trial was published in the American Journal of Psychiatry . Abbar and colleagues similarly published 84% remission from suicidality on the C-SSRS in patients treated with ketamine, vs. 28% in those treated with placebo ($P<.0001$). This trial was published in the British Medical Journal. Data are expected to be transmitted to FDA by July 2024.

In November 2023, the Company initiated manufacture of ketamine together with Nephron Pharmaceuticals, Inc. to develop a single patient presentation of ketamine. Twelve-month real-time stability on the first manufactured lot of NRX-100 (ketamine) at Nephron Pharmaceuticals, utilizing commercial scale processes, was reached on September 24, 2024. Demonstrating the ability to manufacture drug product, and prove its stability, are critical components of the drug approval process with the US FDA.

A long-term challenge with ketamine is that the current formulation (KETALAR®) is highly acidic. While it is suitable for intravenous use, it cannot be administered subcutaneously. In March 2024 the Company demonstrated the formulation of a pH neutral patentable form of IV ketamine that it anticipates will have widespread applicability both in treatment of depression and chronic pain.

Treatment of Urinary Tract Infection ("*UTI*") and Urosepsis:

Although treatment of UTI is quite different from use of NRX-101 to treat Central Nervous System disorders, D-cycloserine was originally developed as an antibiotic because of its role in disrupting the cell wall of certain pathogens. During Q3 2023, NRx tested NRX-101 and its components against resistant pathogens that appear on the Congressionally mandated QIDP list and proved in vitro effectiveness against antibiotic-resistant *E. coli, Pseudomonas, and Acinetobacter.* Accordingly, NRx was granted QIDP designation, Fast Track Designation, and Priority Review by the US FDA in January 2024.

In recent years, increased antibiotic resistance to common pathogens that cause urinary tract infections and urosepsis (i.e., sepsis originating in the urinary tract) has resulted in a marked increase in cUTI, hospitalization, and death from urosepsis. The US Center for Disease Control and Prevention reports that more than 1.7 million Americans contract sepsis each year, of whom at least 350,000 die during their hospitalization or are discharged to hospice (CDC Sepsis Ref.). There are approximately three million patients per year who contract cUTI in the U.S. annually (Lodise, et. al.). Additionally, should NRX-101 succeed in clinical trials, the Company will consider developing a follow-on product that is anticipated to achieve another 20 years of patent exclusivity.

A key challenge in the treatment of cUTI is the tendency of advanced antibiotics to cause C. Difficile infection, which is fatal in 10% of those who contract it over the age of 65 and results in prolonged hospitalization in many more. The Company recently announced data demonstrating that NRX-101 does not compromise the intestinal microbiome, unlike common antibiotics including Clindamycin and Ciprofloxacin. Should these findings be documented in human patients, NRX-101 would represent the only treatment for cUTI that does not cause *C. Difficile* infection.

Recent Developments

Resignation of CEO, Stephen Willard

On October 7, 2024, Stephen Willard, the Chief Executive Officer of the Company provided notice to the Board that he was resigning from the Company, effective immediately, in order to assume the leadership of an early stage biotechnology company. Mr. Willard's resignation was not a result of any disagreement with the Company on any matter relating to its operations, policies, or practices, or to any issues regarding its accounting policies or practices. Jonathan Javitt, Chairman of the Board of Directors of the Company, was appointed as Interim Chief Executive Officer concurrent with Mr. Willard's resignation. All terms and conditions of Dr. Javitt's existing consulting agreement will remain in full force and effect.

Reverse Stock Split

On March 28, 2024, the Company filed with the Secretary of State of the State of Delaware a Certificate of Amendment to the Company's Second Amended and Restated Certificate of Incorporation (the "*Charter Amendment*") to effect a 1-for-10 reverse stock split (the "*Reverse Stock Split*") of the Company's Common Stock, par value $0.001 per share (the "*Common Stock*"), which Reverse Stock Split was effective April 1, 2024. All references in this Report to number of common shares, price per share and weighted average number of shares outstanding have been adjusted to reflect the Reverse Split on a retroactive basis.

August 2024 SPA

On August 12, 2024, the Company executed a Securities Purchase Agreement (the "SPA") and related agreements, under which the Company agreed to sell and issue, and certain purchasers agreed to purchase, an aggregate of $16.3 million of securities. The consideration payable by the purchasers under the SPA will be comprised of three equal closings, each subject to certain closing conditions. The securities to be issued and sold by the Company include up to $16.3 million of senior secured convertible notes (the "Notes") and warrants to purchase shares of the Company's common stock (the "Warrants"). The proceeds arising from the sale of the Notes and the Warrants were used to settle the Company's outstanding amounts owed to Streeterville (as defined below) and other working capital needs. The Company has received the first and second tranche.

The Notes bear interest at the rate of 6% per annum and mature in 15 months following their date of issuance. The Notes may be settled in cash or in shares of the Company's common stock, at the sole discretion of the holder, at the applicable conversion price. The Notes may not be prepaid by the Company however, the holders of the Notes may elect to convert the Notes, in whole or in part, into shares of the Company's common stock at any time after the original issuance date. The conversion price will equal the lower of (i) $2.4168 or (ii) a price equal to 92% of the lowest volume-weighted average price during the seven-trading day period immediately preceding the applicable conversion date. The Notes include certain redemption, protection features and default interest and penalties. The Notes are secured by all assets of the Company, including its intellectual property.

The Warrants have a term of 5 years, and exercise price of $2.42 and are exercisable immediately upon issuance.

Streeterville Settlement

On August 12, 2024, the Company and Streeterville entered into a Settlement and Release of Claims (the "*Settlement Agreement*"), whereby the Company and Streeterville agreed to settle all disputes between the parties and release the Company from all obligations arising from the Notes at certain Securities Purchase Agreement, dated November 4, 2022 ("*Streeterville Notes*"), between the Company and Streeterville, and that certain Convertible Promissory Note, dated November 4, 2022, issued to Streeterville by the Company, in exchange for a payment of $2.5 million upon the initial closing of the sale of the Notes, and within 60 days thereafter, a second payment of $3.05 million. The Company made the $2.5 million payment upon the closing on August 15, 2024. The Company made the $3.05 million payment in October 2024

April 2024 Offering

On April 18, 2024, we entered into the April Underwriting Agreement with EF Hutton LLC, as the representative of the April Underwriters, relating to the April Offering of 607,000 shares of the Company's Common Stock. The public offering price for each share of Common Stock was $3.30. On April 19, 2024, the Offering closed. Aggregated proceeds from the Public Offering were approximately $2.4 million (including April Overallotment Exercise proceeds), before deducting underwriting discounts and commission and estimated expenses payable by the Company

Pursuant to the April Underwriting Agreement and the engagement letter dated April 18, 2024, by and between the Company and Representative, the Company agreed to issue to the Representative in connection with the April Offering, a warrant to purchase up to a number of shares of Common Stock representing 5.0% of the Shares and any April Option Shares (as defined below) sold, at an initial exercise price of $3.63 per share, subject to certain adjustments (the "April Underwriter's Warrant"). On April 19, 2024, the Company issued to the Representative the April Underwriter's Warrant to purchase up to 30,350 shares of Common Stock. The April Underwriter's Warrants and Over-Allotment Warrants is exercisable nine months following the date of the Underwriting Agreement and terminates on the five-year anniversary of the date of the April Underwriting Agreement.

Pursuant to the April Underwriting Agreement, the Company also granted the Representative a 45-day Over-Allotment Option to purchase up to an additional 91,050 April Option Shares. In connection with the April Overallotment Exercise, we issued an additional April Underwriter's Warrant to purchase up to 4,553 shares of Common Stock. The April Overallotment Exercise was exercised in full and closed.

Increase in At-The-Market Offering Agreement

On April 15, 2024, the Company increased the maximum aggregate offering amount of the shares of Common Stock issuable under that certain At the Market Offering Agreement, dated August 14, 2023 (the "*Offering Agreement*"), with H.C. Wainwright & Co., and filed a prospectus supplement (the "*Current Prospectus Supplement*") under the Offering Agreement for an aggregate of $4.9 million. Though September 30, 2024, the Company received aggregate net cash proceeds to the Company from the ATM Purchases Agreements were approximately $1.7 million.

February 2024 Offerings

On February 27, 2024, we entered into the February Underwriting Agreement with the Representative (as defined above), as the representative of the February Underwriters (as defined above), relating to the February 2024 Public Offering (as defined above) of 500,000 shares of the Common Stock. The public offering price for each share of Common Stock was $3.00, and the February Underwriters purchased the shares of Common Stock pursuant to the February Underwriting Agreement at a price for each share of Common Stock of $2.76. On February 28, 2024, the Offering closed. Aggregate gross proceeds from the February 2024 Public Offering were approximately $1.7 million (including Overallotment Exercise proceeds), before deducting underwriting discounts and commissions and estimated expenses payable by the Company.

Pursuant to the February Underwriting Agreement and the engagement letter, dated as of February 22, 2024, by and between the Company and the Representative, the Company agreed to issue to the Representative in connection with the February 2024 Public Offering, a warrant to purchase up to a number of shares of Common Stock representing 5.0% of the shares of Common Stock and any February Option Shares (as defined below) sold, at an initial exercise price of $3.30 per share, subject to certain adjustments (the "*February Underwriter's Warrant*"). On February 28, 2024, the Company issued to the Representative the February Underwriter's Warrant to purchase up to 25,000 shares of Common Stock. The February Underwriter's Warrant is exercisable six months following the date of the February Underwriting Agreement and terminates on the five-year anniversary of the date of the February Underwriting Agreement.

Pursuant to the February Underwriting Agreement, the Company also granted the Representative a 45-day Over-Allotment Option to purchase up to an additional 75,000 February Option Shares. On March 5, 2024, the February Underwriters exercised the February Over-Allotment Option to purchase an additional 75,000 February Option Shares. In connection with the February Overallotment Exercise, we issued an additional February Underwriter's Warrant to purchase up to 3,750 shares of Common Stock. The February Overallotment Exercise closed on March 6, 2024.

On February 29, 2024, we entered into a securities purchase agreement with an investor providing for the issuance and sale of 270,000 shares of Common Stock and warrants to purchase up to 270,000 shares of Common Stock at a price of $3.80 per share of Common Stock and accompanying warrant, which represents a 26.7% premium to the offering price in the February 2024 Public Offering. The Common Stock and the February Warrants were offered pursuant to a private placement under Section 4(a)(2) of the Securities Act of 1933, as amended (the "*Securities Act*"). The February Warrants will have an exercise price of $3.80 per share, are initially exercisable beginning six months following the date of issuance, and will expire 5 years from the date of issuance. The aggregate net cash proceeds to the Company from the February 2024 Private Placement (as defined above) were approximately $1.0 million.

Financial Results

Since inception, the Company has incurred significant operating losses. For the three months ended September 30, 2024 and 2023, the Company's net loss was $1.6 million and $6.1 million, respectively. For the nine months ended September 30, 2024 and 2023, the Company's net loss was $16.0 million and $25.8 million, respectively. As of September 30, 2024, the Company had an accumulated deficit of $269.2 million, a stockholders' deficit of $18.8 million and a working capital deficit of $16.2 million.

Going Concern

The Company has secured operating capital that it anticipates as sufficient to fund its drug development operations through year end and to finance submission of FDA New Drug Applications for NRX-100 and NRX-101. The Company may pursue additional equity or debt financing or refinancing opportunities in 2024 to fund ongoing clinical activities, to meet obligations under its current debt arrangements and for general corporate purposes. Such arrangements may take the form of loans, equity offerings, strategic agreements, licensing agreements, joint ventures or other agreements. The sale of equity could result in additional dilution to the Company's existing shareholders. The Company cannot make any assurances that additional financing will be available to it and, if available, on acceptable terms, or that it will be able to refinance its existing debt obligations which could negatively impact the Company's business and operations and could also lead to a reduction in the Company's operations. The Company will continue to carefully monitor the impact of its continuing operations on the Company's working capital needs and debt repayment obligations. As such, the Company has concluded that substantial doubt exists regarding the Company's ability to continue as a going concern for a period of at least twelve months from the date of issuance of these condensed consolidated financial statements.

The accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that may be necessary if the Company is unable to continue as a going concern.

Nasdaq Listing Compliance

Following a notice of deficiency on October 17, 2023 and a subsequent Reverse Stock Split on April 17, 2024, as previously disclosed, we received a written notice from Nasdaq informing the Company that it has regained compliance for continued listing on the Nasdaq Capital Market. Subsequent to the end of the period, on August 6, 2024, the Company received a notice of deficiency from the Nasdaq based on current failure to meet the required Market Value of Listed Securities as disclosed in an 8-K filing on August 12, 2024. The Company has a six month period in which to cure this deficiency or to apply for an extension.

Components of Results of Operations

Research and development expense

The Company's research and development expense consists primarily of costs associated with the Company's clinical trials, salaries, payroll taxes, employee benefits, and equity-based compensation charges for those individuals involved in ongoing research and development efforts. Research and development costs are expensed as incurred. Advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received.

General and administrative expense

General and administrative expenses consist primarily of salaries, stock-based compensation, consultant fees, and professional fees for legal and accounting services.

Results of operations for the three months ended September 30, 2024 and 2023

The following table sets forth the Company's selected statements of operations data for the following periods (in thousands):

	Three months ended September 30,		Change
	2024	2023	Dollars
	(Unaudited)		
Operating expense:			
Research and development	$ 611	$ 3,314	$ (2,703)
General and administrative	2,411	2,494	(83)
Settlement Expense	—	—	—
Total operating expense	3,022	5,808	(2,786)
Loss from operations	$ (3,022)	$ (5,808)	$ 2,786
Other (income) expense:			
Interest income	$ (6)	$ (119)	$ 113
Interest expense	—	40	(40)
Change in fair value of convertible notes payable and accrued interest	(1,355)	359	(1,714)
Change in fair value of warrant liabilities	(165)	(26)	(139)
Loss on convertible note redemptions	127	—	127
Total other (income) expense	(1,399)	254	(1,653)
Loss before tax	(1,623)	(6,062)	4,439
Net loss	$ (1,623)	$ (6,062)	$ 4,439

Operating expense

Research and development expense

For the three months ended September 30, 2024, the Company recorded $0.6 million of research and development expense compared to approximately $3.3 million for the three months ended September 30, 2023. The decrease of $2.7 million is related primarily to a decrease of $2.1 million in clinical trials and development expense due to the conclusion of the phase 2 study related to NRX-101 and the Company's cash conservation efforts, less than $0.1 million in shipping, freight, and delivery, less than $0.1 million in other regulatory and process development costs, less than $0.1 million related to stock-based compensation, less than $0.1 million related to the Alvogen warrants, and $0.2 million related to fees paid to regulatory and process development consultants. The research and development expense for the three months ended September 30, 2024 and 2023, respectively, includes less than $0.1 million and $0.1 million, respectively of non-cash stock-based compensation.

General and administrative expense

For the three months ended September 30, 2024, the Company recorded $2.4 million of general and administrative expense compared to approximately $2.5 million for the three months ended September 30, 2023. The decrease of less than $0.1 million is related primarily to a decrease of less than $0.1 million in insurance expense, $0.2 million in stock-based compensation expense, and $0.5 million in employee expenses offset by an increase of $0.4 million in consultant fees, $0.5 million in legal expense. The general and administrative expense for the three months ended September 30, 2024 and 2023, respectively, includes $0.1 million and $0.3 million, respectively, of non-cash stock-based compensation.

Other (income) expense

Interest income

For the three months ended September 30, 2024, the Company recorded less than $0.1 million of interest income compared to $0.1 million of interest income for the three months ended September 30, 2023. The decrease of less than $0.1 million is due to interest earned in the Company's money market account.

Interest expense

For the three months ended September 30, 2024, the Company recorded $0 of interest income compared to less than $0.1 million of interest expense for the three months ended September 30, 2023. The decrease of less than $0.1 million is due to no premiums being paid on the convertible notes.

Change in fair value of convertible note payable

For three months ended September 30, 2024, the Company recorded a gain of $1.4 million related to the change in fair value of the convertible notes payable which are accounted for under the fair value option. For the three months ended September 30, 2023, the Company recorded a loss of approximately $0.4 million related to the change in fair value of the convertible notes payable which are accounted for under the fair value option.

Change in fair value of warrant liabilities

The change in fair value of warrant liabilities reflects the changes in the carrying value of our liability-classified warrants (see Note 9 and Note 11).

Results of operations for the nine months ended September 30, 2024 and 2023

The following table sets forth the Company's selected statements of operations data for the following periods (in thousands):

	Nine months ended September 30,		Change
	2024	2023	Dollars
	(Unaudited)		
Operating expense:			
Research and development	$ 5,163	$ 10,837	$ (5,674)
General and administrative	10,907	12,344	(1,437)
Settlement Expense	—	250	(250)
Total operating expense	16,070	23,431	(7,361)
Loss from operations	$ (16,070)	$ (23,431)	$ 7,361
Other (income) expense:			
Interest income	$ (40)	$ (420)	$ 380
Interest expense	230	40	190
Convertible note default penalty	849	—	849
Change in fair value of convertible notes payable and accrued interest	(1,014)	2,794	(3,808)
Change in fair value of warrant liabilities	(174)	(27)	(147)
Loss on convertible note redemptions	127	—	127
Total other (income) expense	(22)	2,387	(2,409)
Loss before tax	(16,048)	(25,818)	9,770
Net loss	$ (16,048)	$ (25,818)	$ 9,770

Operating expense

Research and development expense

For the nine months ended September 30, 2024, the Company recorded $5.2 million of research and development expense compared to approximately $10.8 million for the nine months ended September 30, 2023. The decrease of $5.7 million is related primarily to a decrease of $6.1 million in clinical trials and development expense due to the conclusion of the phase 2 study related to NRX-101 and the Company's cash conservation efforts, $0.6 million in other regulatory and process development costs, $0.2 million in shipping, freight, and delivery, $0.2 million related to stock-based compensation, partially offset by an increase in $1.3 million related to Alvogen warrants and $0.2 million related to fees paid to regulatory and process development consultants. The research and development expense for the nine months ended September 30, 2024 and 2023 includes less than $0.1 million and $0.3 million, respectively, of non-cash stock-based compensation.

General and administrative expense

For the nine months ended September 30, 2024, the Company recorded $10.9 million of general and administrative expense compared to approximately $12.3 million for the nine months ended September 30, 2023. The decrease of $1.4 million is related primarily to a decrease of $2.1 million in insurance expense, $1.3 million in employee expense, $0.9 million in stock-based compensation expense, and $0.1 million in patent expense, partially offset by an increase of $1.7 million in consultant fees, and $1.3 million in legal expense. The general and administrative expense for the nine months ended September 30, 2024 and 2023, respectively, includes $0.4 million and $1.3 million, respectively, of non-cash stock-based compensation.

Other (income) expense

Interest income

For the nine months ended September 30, 2024, the Company recorded less than $0.1 million of interest income compared to $0.4 million of interest income for the nine months ended September 30, 2023. The decrease of $0.3 million is due to interest earned in the Company's money market account.

Interest expense

For the nine months ended September 30, 2024, the Company recorded $0.2 million of interest expense, compared to less than $0.1 interest expense for the nine months ended September 30, 2023. The increase of $0.2 million is due to premiums for cash payments on the convertible note.

Convertible note default penalty

For the nine months ended September 30, 2024, the Company recorded $0.8 million of a default penalty for the nine months ended September 30, 2023. The increase is due to alleged default in connection with the convertible note.

Change in fair value of convertible note payable

For nine months ended September 30, 2024, the Company recorded a gain of $1.0 million related to the change in fair value of the convertible notes payable which are accounted for under the fair value option. For the nine months ended September 30, 2023, the Company recorded a loss of approximately $2.8 million related to the change in fair value of the convertible note payable which is accounted for under the fair value option.

Change in fair value of warrant liabilities

The change in fair value of warrant liabilities reflects the changes in the carrying value of our liability-classified warrants (see Note 9 and Note 11).

Loss on convertible note redemptions

For nine months ended September 30, 2024, the Company recorded a loss of $0.1 million related to convertible note redemptions calculated as the difference between the redemption price as calculated as per the terms of the Anson Note (See Note 7) relative to the fair value of the Common Stock on the date of redemption.

Liquidity and Capital Resources

The Company has generated no revenues, has incurred operating losses since inception, expects to continue to incur significant operating losses for the foreseeable future and may never become profitable. Until such time as the Company is able to establish a revenue stream from the sale of its therapeutic products, it is dependent upon obtaining necessary equity and/or debt financing to continue operations. The Company cannot make any assurances that sales of NRX-101 will commence in the near term or that additional financings will be available to it on acceptable terms or at all. This could negatively impact our business and operations and could also lead to the reduction of our operations.

August 2024 SPA

On August 12, 2024, the Company executed the SPA and related agreements, under which the Company agreed to sell and issue, and certain purchasers agreed to purchase, an aggregate of $16.3 million of securities. The consideration payable by the purchasers under the SPA will be comprised of three equal closings, each subject to certain closing conditions. The securities to be issued and sold by the Company include up to $16.3 million of the Notes and warrants to purchase 1.4 million shares of the Company's common stock. The proceeds are expected to be used to settle the Company's outstanding amounts owed to Streeterville and other working capital needs. The Notes bear interest at the rate of 6% per annum and mature in 15 months following their date of issuance. The Notes may be settled in cash or in shares of the Company's common stock, at the sole discretion of the holder, at the applicable conversion price. The Note may not be prepaid by the Company however, the holders of the Note may elect to convert the Notes, in whole or in part, into shares of the Company's common stock at any time after the original issuance date. The conversion price will equal the lower of (i) $2.4168 or (ii) a price equal to 92% of the lowest volume-weighted average price during the seven-trading day period immediately preceding the applicable conversion date. The Notes include certain redemption, protection features and default interest and penalties. The Notes are secured by all assets of the Company, including its intellectual property. The Warrants have a term of 5 years, and exercise price of $2.42 and are exercisable immediately upon issuance. The Company is the process of assessing the accounting treatment of the transaction. The aggregate net cash proceeds to the Company from the August 2024 SPA were approximately $4.5 million. On August 14, 2024, the first tranche closed. Subsequent to September 30, 2024, the second tranche has closed.

April 2024 Offering

On April 18, 2024, we entered into the April Underwriting Agreement with the Representative, as the representative of the April Underwriters, relating to the April Offering of the Shares, which April Offering closed on the April Closing Date. The public offering price for each share of Common Stock was $3.30. Pursuant to the April Underwriting Agreement, the Company also granted the Representative the April Over-Allotment Option. Aggregated gross proceeds from the April Underwriting Agreement were approximately $2.4 million (including April Overallotment Exercise proceeds), before deducting and commissions and estimated expenses payable by the Company. The Company intends to use the net proceeds from the April 2024 Public Offering for working capital and general corporate purposes.

On May 23, 2024, the Underwriters in the April 2024 Public Offering exercised their April Over-Allotment Option to purchase an additional 91,050 April Option Shares. In connection with the April Overallotment Exercise, we issued an additional April Underwriter Warrant to purchase up to 4,553 shares of Common Stock. The April Overallotment was exercised in full and closed on May 23, 2024.

February 2024 Offerings

On February 27, 2024, the Company entered into an February Underwriting Agreement (as defined above) with EF Hutton LLC, as the Representative (as defined above) of the February Underwriters (as defined above), relating to the February 2024 Public Offering. The public offering price for each share of Common Stock was $3.00 and the February Underwriters purchased the shares of Common Stock pursuant to the February Underwriting Agreement at a price for each share of Common Stock of $2.76. Pursuant to the February Underwriting Agreement, the Company also granted the Representative the February Over-Allotment Option. Aggregate gross proceeds from the February Underwriting Agreement were approximately $1.7 million (including February Overallotment Exercise proceeds), before deducting underwriting discounts and commissions and estimated expenses payable by the Company. The Company intends to use the net proceeds from the February 2024 Public Offering for working capital and general corporate purposes. The Company also used the proceeds from February 2024 Public Offering to repay the Convertible Promissory Note initially issued to Streeterville Capital, LLC in November 2022.

On March 5, 2024, the Underwriters in the February 2024 Public Offering exercised their February Over-Allotment Option to purchase an additional 75,000 February Option Shares. In connection with the February Overallotment Exercise, we issued an additional February Underwriter's Warrant to purchase up to 3,750 shares of Common Stock. The February Overallotment Exercise closed on March 6, 2024.

On February 29, 2024, the Company completed the February 2024 Private Placement. Pursuant to the securities purchase agreement, the Company issued and sold 270,000 shares of Common Stock and warrants to purchase up to 270,000 shares of Common Stock at a price of $3.80 per share of Common Stock and accompanying warrant, which represents a 26.7% premium to the offering price in February 2024 Public Offering. The common stock and the February Warrants were offered pursuant to a private placement under Section 4(a)(2) of the Securities Act. The February Warrants will have an exercise price of $3.80 per share, are initially exercisable beginning six months following the date of issuance, and will expire 5 years from the date of issuance. The aggregate net cash proceeds to the Company from the February 2024 Private Placement were approximately $1.0 million.

At-The Market Offering Agreement

From July 11, 2024 to July 30, 2024, the Company announced that it entered into multiple purchase agreements (the "*ATM Purchase Agreements*") subject to standard closing conditions where accredited investors purchased 103,063 shares of unregistered Common Stock at a range of $2.421 – $2.528 per share. During the quarter ended September 30, 2024, the Company sold additional shares of Common Stock at an aggregate sales price of $0.3 million.

Cash Flows

The following table presents selected financial information and statistics for each of the periods shown below:

	September 30, 2024	December 31, 2023
Balance Sheet Data:		
Cash	$ 1,646	$ 4,595
Total assets	4,462	7,315
Convertible notes payable	6,035	9,161
Total liabilities	23,284	19,048
Total stockholders' deficit	(18,822)	(11,733)

	September 30,	
	2024	2023
	(Unaudited)	
Statement of Cash Flow Data:		
Net cash used in operating activities	$ (8,539)	$ (18,465)
Net cash used in investing activities	—	(4)
Net cash provided by financing activities	5,590	7,317
Net decrease in cash	$ (2,949)	$ (11,152)

Operating activities

During the nine months ended September 30, 2024, operating activities used approximately $8.5 million of cash, primarily resulting from a net loss of $16.0 million, partially offset by (a) net non-cash losses of $2.1 million, including a gain of $1.0 million in change in fair value of convertible promissory notes, and gain of $0.2 million in change in fair value of warrants, $0.4 million of stock-based compensation, $1.3 million of contract costs related to Alvogen termination, $0.8 million of default penalties, $0.5 million in debt issuance costs, and (b) changes in operating assets and liabilities of $5.4 million.

During the nine months ended September 30, 2023, operating activities used $18.5 million of cash, primarily resulting from a net loss of $25.8 million, reduced by (a) net non-cash losses of $4.6 million, including $2.8 million in change in fair value of convertible promissory note and $1.6 million of stock-based compensation, and (b) changes in operating assets and liabilities of $2.7 million.

Financing activities

During the nine months ended September 30, 2024, financing activities provided $5.6 million of cash resulting from $1.0 million in proceeds from issuance of Common Stock and warrants issued in a private placement, $4.9 million in proceeds from issuance of Common Stock and warrants, $2.9 million in proceeds from the Anson Note, and $2.1 million from warrant proceeds offset by $4.8 million in repayments of the convertible notes.

During the nine months ended September 30, 2023, financing activities provided $7.3 million of cash resulting from $8.1 million in proceeds from issuance of common stock and warrants issued in a private placement, net of issuance costs, and $0.8 million in proceeds from proceeds from issuance of insurance loan offset by $2.3 million in repayments of the convertible note.

Contractual Obligations and Commitments

See Note 7, Debt, and Note 8, Commitments and Contingencies, of the notes to the Company's condensed consolidated financial statements as of and for the nine months ended September 30, 2024 included elsewhere in this report for further discussion of the Company's commitments and contingencies.

Milestone Payments

Pursuant to the legal settlement with Sarah Herzog Memorial Hospital Ezrat Nashim ("*SHMH*") in September 2018, which included the license of intellectual property rights from SHMH, an ongoing royalty of 1% to 2.5% of NRX-101 gross sales is due to SHMH, together with milestone payments of $0.3 million, upon completion of phase 3 trials and commercial sale of NRX-101. The milestone payments for developmental and commercial milestones range from $0.1 million to $0.8 million. Annual maintenance fees are up to $0.2 million.

Off-Balance Sheet Arrangements

The Company is not party to any off-balance sheet transactions. The Company has no guarantees or obligations other than those which arise out of normal business operations.

Critical Accounting Policies and Significant Judgments and Estimates

The Company's management's discussion and analysis of its financial condition and results of operations is based on its financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States of America ("*GAAP*"). The preparation of these financial statements requires the Company to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities as of the date of the balance sheet and the reported amounts of expenses during the reporting period. In accordance with GAAP, the Company evaluates its estimates and judgments on an ongoing basis. The most critical estimates relate to the stock-based compensation, the valuation of warrants, and the fair value of notes payable. The Company bases its estimates and assumptions on current facts, historical experiences, and various other factors that the Company believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The Company defines its critical accounting policies as those accounting principles that require it to make subjective estimates and judgments about matters that are uncertain and are likely to have a material impact on its financial condition and results of operations, as well as the specific manner in which the Company applies those principles. While its significant accounting policies are more fully described in Note 3 to its financial statements, the Company believes the following are the critical accounting policies used in the preparation of its financial statements that require significant estimates and judgments.

Stock-based compensation

We measure stock option awards granted to employees and directors based on the fair value of the award on the date of the grant and recognize compensation expense of those awards over the requisite service period, which is generally the vesting period of the respective award. For restricted stock awards, the grant date fair value is the fair market value per share as of the grant date based on the closing trading price for the Company's stock. The straight-line method of expense recognition is applied to awards with service-only conditions. We account for forfeitures as they occur.

We estimate the fair value of each stock option award using the Black-Scholes option-pricing model, which uses as inputs the fair value of our Common Stock and assumptions we make for the volatility of our Common Stock, the expected term of our stock-based awards, the risk-free interest rate for a period that approximates the expected term of our stock-based awards, and our expected dividend yield. Therefore, we estimate our expected volatility based on the implied volatility of publicly traded warrants on our Common Stock and historical volatility of a set of our publicly traded peer companies. We estimate the expected term of our options using the "simplified" method for awards that qualify as "plain-vanilla" options. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that we have never paid cash dividends on Common Stock and do not expect to pay any cash dividends in the foreseeable future.

The assumptions used in determining the fair value of stock-based awards represent reasonable estimates, but the estimates involve inherent uncertainties and the application of our judgment. As a result, if factors change and we use significantly different assumptions or estimates, our stock-based compensation expense could be materially different in the future.

Warrant liabilities

We account for warrants as either equity-classified or liability-classified instruments based on an assessment of the warrant's specific terms and applicable authoritative guidance in the Financial Accounting Standards Board ("*FASB*") Accounting Standards Codification ("*ASC*") Topic 480, Distinguishing Liabilities from Equity ("*ASC 480*") and FASB ASC Topic 815, Derivatives and Hedging ("*ASC 815*"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and whether the warrants meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own Common Stock and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of warrant issuance and as of each subsequent quarterly period end date while the warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, the warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants that do not meet all the criteria for equity classification, the warrants are required to be recorded at their initial fair value on the date of issuance, or date of modification, and each balance sheet date thereafter. Changes in the estimated fair value of the warrants are recognized as a non-cash gain or loss on the statements of operations. The fair value of the Private Placement Warrants was estimated using a Black Scholes valuation approach and the fair value of the Substitute Warrants was estimated using a modified Black Scholes valuation approach which applies a probability factor based on the earnout cash milestone and earnout shares milestone probabilities of achievement at each reporting period.

Convertible notes payable

As permitted under FASB ASC Topic 825, Financial Instruments ("*ASC 825*"), the Company elects to account for its convertible promissory note, which meets the required criteria, at fair value at inception and at each subsequent reporting date. Subsequent changes in fair value are recorded as a component of non-operating loss in the consolidated statements of operations. As a result of electing the fair value option, direct costs and fees related to the convertible promissory notes are expensed as incurred.

The Company estimates the fair value of its notes payable using a Monte Carlo simulation model, which uses as inputs the fair value of its Common Stock and estimates for the equity volatility of its Common Stock, the time to expiration (i.e., expected term) of the note, the risk-free interest rate for a period that approximates the time to expiration, and probability of default. Therefore, the Company estimates its expected future equity volatility based on the historical volatility of its Common Stock price utilizing a lookback period consistent with the time to expiration. The time to expiration is based on the contractual maturity date, giving consideration to the redemption features embedded in the notes. The risk-free interest rate is determined based on the U.S. Treasury yield curve in effect at the time of measurement for time periods approximately equal to the time to expiration. Unless otherwise specified, the probability of default is estimated using Bloomberg's Default Risk function which uses its financial information to calculate a default risk specific to the Company. For the Streeterville valuations during the nine months ended September 30, 2024, the probability of default was based on management's estimates which include, the Company's current cash runway, current efforts to raise financing, and current economic environment. Interest expense is included within the fair value of the note payable. Management believes those assumptions are reasonable but if these assumptions change, it could materially affect the fair value.

The assumptions used in determining the fair value of the convertible note payable represent reasonable estimates, but the estimates involve inherent uncertainties and the application of our judgment. As a result, if factors change and the Company's uses significantly different assumptions or estimates, the change in fair value of the convertible note payable recorded to other (income) expense could be materially different in the future.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As a smaller reporting company, we are not required to provide the information required by this Item.

Item 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined under Rule 13a-15(e) promulgated under the Exchange Act, designed to ensure that information required to be disclosed in our reports filed pursuant to the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and our principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

In designing and evaluating the disclosure controls and procedures, we recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and we were required to apply our judgment in evaluating the cost-benefit relationship of possible controls and procedures. We have carried out an evaluation as of September 30, 2024 under the supervision, and with the participation, of our management, including our Chief Executive Officer (who serves as our principal executive officer) and our Chief Financial Officer (who serves as our principal financial officer), of the effectiveness of the design and operation of our disclosure controls and procedures.

Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of September 30, 2024 in providing reasonable assurance of achieving the desired control objectives.

(b) Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal controls over financial reporting that occurred during the three months ended September 30, 2024 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. The Company continues to review its disclosure controls and procedures, including its internal control over financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that the Company's systems evolve with its business.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

See Note 8, Commitments and Contingencies, of the notes to the Company's unaudited condensed consolidated financial statements as of and for the three and nine months ended September 30, 2024 included elsewhere in this report for further discussion of certain legal proceedings in which we are involved.

Item 1A. Risk Factors

We have disclosed the risk factors that materially affect our business, financial condition or results of operations under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 29, 2024 (the "*Annual Report on Form 10-K*"). There have been no material changes from the risk factors previously disclosed. You should carefully consider the risk factors set forth in the Annual Report on Form 10-K and other information set forth elsewhere in this Quarterly Report on Form 10-Q. You should be aware that these risk factors and other information may not describe every risk that we face. Additional risks and uncertainties not currently known to us, or that we currently deem to be immaterial, or may not be able to assess, also may materially adversely affect our business, financial condition and/or operating results.

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

No unregistered sales of equity securities occurred during the three months ended September 30, 2024, that were not previously reported.

Item 3. Defaults Upon Senior Securities

No defaults upon senior securities occurred during the three months ended September 30, 2024, that were not previously reported.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None of our directors or executive officers adopted or terminated a Rule 10b5-1 trading arrangement or a non-Rule 10b5-1 trading arrangement during the quarter ended September 30, 2024, as such terms are defined under Item 408(a) of Regulation S-K. Additionally, we did not adopt or terminate a Rule 10b5–1 trading arrangement during the quarter ended September 30, 2024.

Item 6. Exhibits

Exhibit Number	Description	Incorporation by Reference
3.1	Amendment to the Second Amended and Restated Bylaws of NRX Pharmaceuticals, Inc.	Exhibit 3.1 to the Company's Current Report on Form 8-K, filed August 14, 2024
4.1	Form of Senior Secured Convertible Promissory Note to be issued by the Company pursuant to and in accordance with the Securities Purchase Agreement.	Exhibit 4.1 to the Company's Current Report on Form 8-K, filed August 14, 2024
4.2	Form of Common Stock Purchase Warrant to be issued by the Company pursuant to and in accordance with the Securities Purchase Agreement.	Exhibit 4.2 to the Company's Current Report on Form 8-K, filed August 14, 2024
10.1	Securities Purchase Agreement, dated August 12, 2024, by and among the Company and the purchasers signatory thereto.	Exhibit 10.1 to the Company's Current Report on Form 8-K, filed August 14, 2024
10.2	Form of Security Agreement to be entered into by and among the Company and the other parties signatory thereto.	Exhibit 10.2 to the Company's Current Report on Form 8-K, filed August 14, 2024
10.3	Form of Patent Security Agreement, to be entered into by and among the Company and the other parties signatory thereto.	Exhibit 10.3 to the Company's Current Report on Form 8-K, filed August 14, 2024
10.4	Form of Registration Rights Agreement to be entered into by and among the Company and the parties signatory thereto.	Exhibit 10.4 to the Company's Current Report on Form 8-K, filed August 14, 2024
10.5	Form of Subsidiary Guarantee to be entered into by and among the Company and the purchasers signatory thereto.	Exhibit 10.5 to the Company's Current Report on Form 8-K, filed August 14, 2024
10.6	Settlement Agreement and Release of Claims, dated August 12, 2024, between the Company and Streeterville Capital, LLC.	Exhibit 10.6 to the Company's Current Report on Form 8-K, filed August 14, 2024
31.1+	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	
31.2+	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	
32.1+†	Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	
32.2+†	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	
101*	Interactive data files pursuant to Rule 405 of Regulation S-T formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of September 30, 2024 (Unaudited) and December 31, 2023; (ii) Unaudited Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2024 and 2023 ; (iii) Unaudited Condensed Consolidated Statements of Changes in Stockholders' Equity (Deficit) for the three and nine months ended September 30, 2024 and 2023; (iv) Unaudited Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2024 and 2023; and (v) Notes to Unaudited Financial Statements.	
104	Cover Page Interactive Data File (formatted in iXBRL and contained in Exhibit 101)	

\+ Filed herewith.

† This certification is being furnished solely to accompany this Quarterly Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

* In accordance with Rule 406T of Regulation S-T, the XBRL-related information in Exhibit 101 to this Quarterly Report on Form 10-Q is deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act, is deemed not filed for purposes of section 18 of the Exchange Act, and otherwise is not subject to liability under these sections.

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.

NRX PHARMACEUTICALS, INC.

Date: November 14, 2024

By: /s/ Richard Narido
Richard Narido
Chief Financial Officer (Principal Financial Officer)

Exhibit 31.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jonathan Javitt, Interim Chief Executive Officer of NRx Pharmaceuticals, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NRx Pharmaceuticals, Inc. (the "Registrant");

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 Quarterly 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 Quarterly Report;

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

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant is made known to us by others within those entities, particularly during the period in which this Quarterly Report is being prepared;

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

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

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

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing 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: November 14, 2024

/s/ Jonathan Javitt
Jonathan Javitt
Interim Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF THE ACTING CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Richard Narido, Chief Financial Officer of NRx Pharmaceuticals, Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NRx Pharmaceuticals, Inc. (the "Registrant");

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 Quarterly 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 Quarterly Report;

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

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant is made known to us by others within those entities, particularly during the period in which this Quarterly Report is being prepared;

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

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

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

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing 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: November 14, 2024

/s/ Richard Narido
Richard Narido
Chief Financial Officer (Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF THE CHIEF EXECUTIVE 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 filing of the Quarterly Report on Form 10-Q for the three months ended September 30, 2024 (the "Report") by NRx Pharmaceuticals, Inc. (the "Registrant"), I, Jonathan Javitt, as Interim Chief Executive Officer of the Registrant hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. the Report fully complies with the requirements of Section 13(a) or Section 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 Registrant.

Date: November 14, 2024

/s/ Jonathan Javitt
Jonathan Javitt
Interim Chief Executive Officer (Principal Executive Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Registrant and will be retained by the Registrant and furnished to the Securities and Exchange Commission or its staff upon request

Exhibit 32.2

CERTIFICATION OF THE ACTING CHIEF 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 filing of the Quarterly Report on Form 10-Q for the three months ended September 30, 2024 (the "Report") by NRx Pharmaceuticals, Inc. (the "Registrant"), I, Richard Narido, as Chief Financial Officer of the Registrant hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. the Report fully complies with the requirements of Section 13(a) or Section 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 Registrant.

Date: November 14, 2024

/s/ Richard Narido
Richard Narido
Chief Financial Officer (Principal Financial Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Registrant and will be retained by the Registrant and furnished to the Securities and Exchange Commission or its staff upon request.