

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

FORM 10-Q

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

For the quarterly period ended September 30, 2024

or

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

For the transition period from _____ to _____

Commission File Number: **001-40458**

SYNAPTOGENIX, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

1185 Avenue of the Americas, 3rd Floor
New York, New York

(Address of principal executive offices)

46-1585656
(I.R.S. Employer Identification No.)

10036
(Zip code)

(973) 242-0005

(Registrant's telephone number, including area code)

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

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	SNPX	The Nasdaq Stock Market LLC

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

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

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

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

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

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

As of November 12, 2024, there were 1,355,613 shares of the registrant's common stock, \$0.0001 par value per share, issued and outstanding.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

Certain statements in this report contain or may contain forward-looking statements. These statements, identified by words such as “plan,” “anticipate,” “believe,” “estimate,” “should,” “expect” and similar expressions, include our expectations and objectives regarding our future financial position, operating results and business strategy. These statements are subject to known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These forward-looking statements were based on various factors and were derived utilizing numerous assumptions and other factors that could cause our actual results to differ materially from those in the forward-looking statements. These factors include, but are not limited to, the significant length of time associated with drug development and related insufficient cash flows and resulting illiquidity, our patent portfolio, our inability to expand our business, significant government regulation of pharmaceuticals and the healthcare industry, lack of product diversification, availability of our raw materials, existing or increased competition, stock volatility and illiquidity, and our failure to implement our business plans or strategies. Most of these factors are difficult to predict accurately and are generally beyond our control. You should consider the areas of risk described in connection with any forward-looking statements that may be made herein. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. You should carefully review this report in its entirety, including but not limited to our financial statements and the notes thereto and the risks described in Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the Securities and Exchange Commission (the “SEC”) on April 1, 2024, as updated in our quarterly reports and current reports filed with the SEC from time to time. We advise you to carefully review the reports and documents we file from time to time with the SEC including our current reports on Form 8-K. Except for our ongoing obligations to disclose material information under securities laws, we undertake no obligation to publicly release any revisions to any forward-looking statements, to report events or to report the occurrence of unanticipated events.

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PART I
FINANCIAL INFORMATION
Item 1. Financial Statements.
**SYNAPTOGENIX, INC.
CONDENSED BALANCE SHEETS**
(Unaudited)

	September 30, 2024	December 31, 2023
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	\$ 19,625,780	\$ 28,661,498
Prepaid Clinical trial expenses	—	375,085
Available for sale debt security	2,443,300	1,438,500
Prepaid expenses and other current assets	211,230	57,677
TOTAL CURRENT ASSETS	22,280,310	30,532,760
Equity method investment	531,927	562,402
Fixed assets, net of accumulated depreciation	14,100	18,505
TOTAL ASSETS	\$ 22,826,337	\$ 31,113,667
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 286,350	\$ 444,633
Accrued expenses	54,542	435,891
Accrued Convertible Preferred payments payable	—	3,395,945
TOTAL CURRENT LIABILITIES	340,892	4,276,469
Warrant liability	3,251,000	140,000
Derivative liability	6,118,000	1,113,000
TOTAL LIABILITIES	9,709,892	5,529,469
Commitments and contingencies		
Series B Convertible redeemable preferred stock, \$.0001 par value and \$1,000 face value, 1,000,000 shares authorized; 0 and 6,000 shares issued and outstanding at September 30, 2024 and December 31, 2023, respectively. Liquidation preference of \$0 plus dividends accrued at 7% per annum of \$0 as of September 30, 2024.		
	—	1,236,940
Series C Convertible redeemable preferred stock, \$.0001 par value and \$1,000 face value, 1,000,000 shares authorized; 5,000 and 0 shares issued and outstanding at September 30, 2024 and December 31, 2023, respectively. Liquidation preference of \$0 plus dividends accrued at 5% per annum of \$13,194 as of September 30, 2024.		
	314,473	—
STOCKHOLDERS' EQUITY		
Common stock - 150,000,000 shares authorized, \$.00001 par value; 1,355,613 shares issued and outstanding as of September 30, 2024 and 963,489 shares issued and outstanding as of December 31, 2023.*	137	96
Additional paid-in capital	54,309,822	57,957,008
Accumulated other comprehensive income	5,702	902
Accumulated deficit	(41,513,689)	(33,610,748)
TOTAL STOCKHOLDERS' EQUITY	12,801,972	24,347,258
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 22,826,337	\$ 31,113,667

* Adjusted to reflect the impact of the 1:25 reverse stock split that became effective on April 4, 2024.

See accompanying notes to condensed financial statements.

SYNAPTOGENIX, INC.
CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

(Unaudited)

	Three Months Ended September 30, 2024	Three Months Ended September 30, 2023	Nine Months Ended September 30, 2024	Nine Months Ended September 30, 2023
OPERATING EXPENSES:				
Research and development	\$ 222,897	\$ 212,103	\$ 1,174,214	\$ 1,397,031
General and administrative	1,136,772	1,217,689	3,457,916	4,784,415
TOTAL OPERATING EXPENSES	1,359,669	1,429,792	4,632,130	6,181,446
OTHER INCOME (LOSS):				
Interest income	300,681	549,995	1,094,584	1,373,511
Share of net loss in equity investment	(12,025)	—	(30,475)	—
Warrant issuance cost	(618,375)	—	(618,375)	—
Loss on issuance of Series C Preferred Stock	(3,812,625)	—	(3,812,625)	—
Change in fair value of warrant liability	(218,000)	674,000	(314,000)	1,055,000
Change in fair value of derivative liability	(22,000)	969,000	1,091,000	(1,289,600)
TOTAL OTHER INCOME (LOSS)	(4,382,344)	2,192,995	(2,589,891)	1,138,911
Net loss (income) before income taxes	5,742,013	(763,203)	7,222,021	5,042,535
Provision for income taxes	—	—	—	—
Net loss	5,742,013	(763,203)	7,222,021	5,042,535
Preferred Stock dividends	306,725	1,124,628	680,919	1,814,277
Deemed dividend - preferred stock extinguishment	—	—	—	5,693,000
Net Loss attributable to common stockholders	\$ 6,048,738	\$ 361,425	\$ 7,902,940	\$ 12,549,812
Change in fair value of available for sale debt security	5,400	—	4,800	—
Net comprehensive loss	\$ 6,043,338	\$ 361,425	\$ 7,898,140	\$ 12,549,812
PER SHARE DATA:				
Basic and diluted loss per common share *	\$ 4.58	\$ 0.84	\$ 6.63	\$ 37.01
Basic and diluted weighted average common shares outstanding *	1,320,000	428,200	1,192,500	339,100

* Adjusted to reflect the impact of the 1:25 reverse stock split that became effective on April 4, 2024.

See accompanying notes to condensed financial statements.

SYNAPTOGENIX, INC.
CONDENSED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY *
(Unaudited)

Three Months Ended September 30, 2023										
	Series B Preferred Stock		Series C Preferred Stock		Common Stock		Additional	Accumulated	Accumulated Other	
	Shares	Amount	Shares	Amount	Shares	Amount	Paid-In Capital	Deficit	Comprehensive Income (Loss)	Total
Balance July 1, 2023	14,000	\$ 2,077,379	—	\$ —	294,611	\$ 29	\$56,850,002	\$(32,019,904)	\$ —	\$24,830,127
Stock based compensation	—	—	—	—	—	—	15,064	—	—	15,064
Issuance of common stock for consulting fees	—	—	—	—	446	1	4,499	—	—	4,500
Preferred stock dividends paid	—	192,500	—	—	—	—	—	(192,500)	—	(192,500)
Reclassification of accrued dividends upon probable redemption of preferred stock	—	—	—	—	—	—	—	—	—	—
Deemed dividend - preferred stock extinguishment	—	46,924	—	—	81,901	8	815,363	(932,128)	—	(116,757)
Preferred stock redemptions and conversions	(4,000)	(2,026,292)	—	—	323,471	32	3,892,847	—	—	3,892,879
Accrual of preferred stock and dividend redemption	(1,000)	(1,058,333)	—	—	—	—	—	—	—	—
Preferred stock accretion	—	2,455,656	—	—	—	—	(2,455,656)	—	—	(2,455,656)
Net loss	—	—	—	—	—	—	—	763,203	—	763,203
Balance September 30, 2023	<u>9,000</u>	<u>\$ 1,687,834</u>	<u>—</u>	<u>\$ —</u>	<u>700,429</u>	<u>\$ 70</u>	<u>\$59,122,119</u>	<u>\$(32,381,329)</u>	<u>\$ —</u>	<u>\$26,740,860</u>

Three Months Ended September 30, 2024										
	Series B Preferred Stock		Series C Preferred Stock		Common Stock		Additional	Accumulated	Accumulated Other	
	Shares	Amount	Shares	Amount	Shares	Amount	Paid-In Capital	Deficit	Comprehensive Income (Loss)	Total
Balance July 1, 2024	—	\$ —	—	\$ —	1,254,309	\$ 127	\$ 54,261,123	\$(35,464,950)	\$ 302	\$ 18,796,602
Stock based compensation	—	—	—	—	—	—	3,791	—	—	3,791
Issuance of Preferred Stock	—	—	5,000	—	—	—	—	—	—	—
Issuance of common stock for consulting fees	—	—	—	—	1,304	—	4,500	—	—	4,500
Preferred stock dividends	—	274,140	—	13,194	—	—	—	(287,334)	—	(287,334)
Deemed dividends on preferred stock	—	19,392	—	—	—	—	—	(19,392)	—	(19,392)
Preferred stock redemptions and conversions	—	—	—	—	100,000	10	341,687	—	—	341,697
Accrual of preferred stock and dividend redemption	—	(293,532)	—	—	—	—	—	—	—	—
Preferred stock accretion	—	—	—	301,279	—	—	(301,279)	—	—	(301,279)
Comprehensive income	—	—	—	—	—	—	—	—	5,400	5,400
Net loss	—	—	—	—	—	—	—	(5,742,013)	—	(5,742,013)
Balance September 30, 2024	<u>—</u>	<u>\$ —</u>	<u>5,000</u>	<u>\$ 314,473</u>	<u>1,355,613</u>	<u>\$ 137</u>	<u>\$ 54,309,822</u>	<u>\$(41,513,689)</u>	<u>\$ 5,702</u>	<u>\$ 12,801,972</u>

Nine Months Ended September 30, 2023										
	Series B Preferred Stock		Series C Preferred Stock		Common Stock		Additional	Accumulated	Accumulated Other	Total
	Shares	Amount	Shares	Amount	Shares	Amount	Paid-In Capital	Deficit	Comprehensive Income	
Balance January 1, 2023	15,000	\$ 2,721,723	—	\$ —	290,681	\$ 29	\$ 52,524,461	\$ (19,831,517)	\$ —	\$ 32,692,973
Stock based compensation	—	—	—	—	—	—	994,261	—	—	994,261
Issuance of common stock for consulting fees	—	—	—	—	4,376	1	113,499	—	—	113,500
Preferred stock dividends paid	—	882,149	—	—	—	—	—	(882,149)	—	(882,149)
Reclassification of accrued dividends upon probable redemption of preferred stock	—	165,375	—	—	—	—	—	—	—	—
Deemed dividends on preferred stock	—	46,924	—	—	81,901	8	815,363	(932,128)	—	(116,757)
Deemed dividend - preferred stock extinguishment	—	—	—	—	—	—	5,693,000	(5,693,000)	—	—
Preferred stock redemptions and conversions	(5,000)	(3,715,941)	—	—	323,471	32	3,892,847	—	—	3,892,879
Accrual of preferred stock and dividend redemption	(1,000)	(3,323,708)	—	—	—	—	—	—	—	—
Preferred stock accretion	—	4,911,312	—	—	—	—	(4,911,312)	—	—	(4,911,312)
Net loss	—	—	—	—	—	—	—	(5,042,535)	—	(5,042,535)
Balance September 30, 2023	9,000	\$ 1,687,834	—	\$ —	700,429	\$ 70	\$ 59,122,119	\$ (32,381,329)	\$ —	\$ 26,740,860

Nine Months Ended September 30, 2024										
	Series B Preferred Stock		Series C Preferred Stock		Common Stock		Additional	Accumulated	Accumulated Other	Total
	Shares	Amount	Shares	Amount	Shares	Amount	Paid-In Capital	Deficit	Comprehensive Income	
Balance January 1, 2024	6,000	\$ 1,236,940	—	\$ —	963,389	\$ 96	\$ 57,957,008	\$ (33,610,748)	\$ 902	\$ 24,347,258
Stock based compensation	—	—	—	—	—	—	21,618	—	—	21,618
Issuance of preferred stock	—	—	5,000	—	—	—	—	—	—	—
Issuance of common stock for consulting fees	—	—	—	—	18,005	3	113,498	—	—	113,501
Preferred stock dividends	—	396,640	—	13,194	—	—	—	(409,834)	—	(409,834)
Deemed dividends on preferred stock	—	271,086	—	—	—	—	—	(271,086)	—	(271,086)
Preferred stock redemptions and conversions	(2,000)	(1,088,630)	—	—	374,219	38	1,430,289	—	—	1,430,327
Accrual of preferred stock and dividend redemption	(4,000)	(5,727,348)	—	—	—	—	—	—	—	—
Preferred stock accretion	—	4,911,312	—	301,279	—	—	(5,212,591)	—	—	(5,212,591)
Comprehensive income (loss)	—	—	—	—	—	—	—	—	4,800	4,800
Net loss	—	—	—	—	—	—	—	(7,222,021)	—	(7,222,021)
Balance September 30, 2024	—	\$ —	5,000	\$ 314,473	1,355,613	\$ 137	\$ 54,309,822	\$ (41,513,689)	\$ 5,702	\$ 12,801,972

* Adjusted to reflect the impact of the 1:25 reverse stock split that became effective on April 4, 2024.

See accompanying notes to condensed financial statements.

SYNAPTOGENIX, INC.
CONDENSED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30, 2024	Nine Months Ended September 30, 2023
CASH FLOW USED IN OPERATING ACTIVITIES		
Net loss	\$ 7,222,021	\$ 5,042,535
Adjustments to reconcile net loss to net cash used by operating activities		
Stock based compensation	21,618	994,261
Warrant issuance cost	618,375	—
Loss on issuance of Series C Convertible Preferred Stock	3,812,625	—
Change in fair value of warrant liability	314,000	(1,055,000)
Change in fair value of derivative liability	(1,091,000)	1,289,600
Share of net loss in equity investment	30,475	—
Consulting services paid by issuance of common stock	113,501	113,500
Depreciation expense	4,405	5,137
Change in assets and liabilities:		
Decrease in prepaid expenses and other current assets	221,531	493,987
Decrease in accounts payable	(158,283)	(445,988)
Decrease in accrued expenses	(381,349)	(460,171)
	3,505,898	935,326
Net Cash Used in Operating Activities	(3,716,123)	(4,107,209)
CASH FLOWS USED IN INVESTING ACTIVITIES		
Purchase of available for sale debt security	(1,000,000)	—
Purchase of fixed assets	—	(2,707)
Net Cash Used in Investing Activities	(1,000,000)	(2,707)
CASH FLOWS FROM FINANCING ACTIVITIES		
Net proceeds from issuance of Series C Convertible Preferred Stock	4,463,000	—
Redemption of Series B Convertible Preferred Stock	(7,831,677)	(1,000,000)
Dividends on Series B Convertible Preferred Stock	(950,918)	(641,015)
Net Cash Used in Financing Activities	(4,319,595)	(1,641,015)
NET DECREASE IN CASH AND EQUIVALENTS	(9,035,718)	(5,750,931)
CASH AND EQUIVALENTS AT BEGINNING OF PERIOD	28,661,498	37,478,480
CASH AND EQUIVALENTS AT END OF PERIOD	\$ 19,625,780	\$ 31,727,549
DISCLOSURES OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Issuance of Common Stock for Series B Convertible Preferred Stock installment conversions	\$ 1,430,327	\$ —
Accretion of Series B Convertible Preferred Stock to redemption value	\$ 4,911,312	\$ —
Accretion of Series C Convertible Preferred Stock to redemption value	\$ 301,279	\$ —
Accrual of Series B Convertible Preferred Stock and Dividend Redemption	\$ 5,727,348	\$ 266,074
Change in fair value of available for sale debt security	\$ 4,800	\$ —
Warrant liability upon issuance of Series C Convertible Preferred Stock	\$ 2,797,000	\$ —
Derivative liability upon issuance of Series C Convertible Preferred Stock	\$ 6,096,000	\$ —

See accompanying notes to condensed financial statements.

SYNAPTOGENIX, INC.
NOTES TO FINANCIAL STATEMENTS
(UNAUDITED)

Unless the context otherwise indicates, references in these Notes to the accompanying financial statements to “we,” “us,” “our” and “the Company” refer to Synaptogenix, Inc. (formerly known as Neurotrope Bioscience, Inc.), a Delaware corporation. References to “Neurotrope,” “Parent Company” or “Parent” refer to Neurotrope, Inc., a Nevada corporation.

Note 1 – Organization, Business, Risks and Uncertainties:

Organization and Business

On May 17, 2020, Neurotrope, Inc. (“Neurotrope” or “the Parent”) announced plans for the complete legal and structural separation of its wholly owned subsidiary, Neurotrope Bioscience, Inc., from Neurotrope (the “Spin-Off”). Under the Separation and Distribution Agreement, Neurotrope planned to distribute all of its equity interest in this wholly owned subsidiary to Neurotrope's stockholders. Following the Spin-Off, Neurotrope does not own any equity interest in the Company, and the Company operates independently from Neurotrope. On December 7, 2020, the Company became an independent company, Synaptogenix, Inc., a Delaware corporation (formerly known as Neurotrope Bioscience, Inc.) (the “Company” or “Synaptogenix”) when the Company filed an amended and restated certificate of incorporation which, among other things, changed its name to Synaptogenix, Inc. The Company's shares of common stock, par value \$0.0001 per share (the “Common Stock”), are listed on The Nasdaq Capital Market under the symbol “SNPX.”

On April 24, 2023, the Company received a written notice from the Listing Qualifications Department of the Nasdaq Stock Market LLC (“Nasdaq”) notifying the Company that for the preceding 30 consecutive business days, the Common Stock did not maintain a minimum closing bid price of \$1.00 per share as required by Nasdaq Listing Rule 5550(a)(2) (the “Minimum Bid Price Requirement”). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), the Company received an initial grace period of 180 calendar days, or until October 23, 2023 (the “Initial Compliance Period”), to regain compliance with the Minimum Bid Price Requirement. On October 24, 2023, the Company received a second written notice from Nasdaq, notifying the Company that it had not regained compliance with the Minimum Bid Price Requirement during the Initial Compliance Period and granting the Company an additional grace period of 180 calendar days, or until April 22, 2024, to regain compliance. On April 4, 2024, the Company effected a one - for - twenty - five reverse stock split of the Common Stock (the “Reverse Stock Split”) in order to regain compliance with the Minimum Bid Price Requirement.

On April 22, 2024, Nasdaq informed the Company that it had regained compliance with the Minimum Bid Price Requirement and that the matter was closed.

Reverse Stock Split

On April 4, 2024, the Company effected the Reverse Stock Split. All share and per share information in this quarterly report have been retroactively adjusted to reflect the Reverse Stock Split.

Liquidity Uncertainties

As of September 30, 2024, the Company had approximately \$ 19.6 million in cash and cash equivalents as compared to \$ 28.7 million at December 31, 2023. The Company expects that its current cash and cash equivalents, approximately \$18.3 million as of the date of this Quarterly Report on Form 10-Q, will be sufficient to support its projected operating requirements and financial commitments for at least the next 12 months from the date of this Quarterly Report. The operating requirements include the current development plans for Bryostatin-1, the Company's novel drug candidate targeting the activation of Protein Kinase C Epsilon and other development projects. The financial commitments include the potential redemption of the Series C Convertible Preferred Stock for cash.

The Company expects to need additional capital in order to initiate and pursue potential additional development projects, including the continuing development beyond the ongoing Phase 2 trial of Bryostatin-1. Any additional equity financing, if available, may not be on favorable terms and would likely be significantly dilutive to the Company's current stockholders, and debt financing, if available, may involve restrictive covenants. If the Company is able to access funds through collaborative or licensing arrangements, it may be required to relinquish rights to some of its technologies or product candidates that the Company would otherwise seek to develop or commercialize on its own, on terms that are not favorable to the Company. The Company's ability to access capital when needed is not assured and, if not achieved on a timely basis, will likely have a materially adverse effect on its business, financial condition and results of operations.

Other Risks and Uncertainties

The Company operates in an industry that is subject to rapid technological change, intense competition, and significant government regulation. The Company's operations are subject to significant risk and uncertainties including financial, operational, technological and regulatory. Such factors include, but are not necessarily limited to, the results of clinical testing and trial activities, the ability to obtain regulatory approval, the limited supply of raw materials, the ability to obtain favorable licensing, manufacturing or other agreements, including risk associated with the Company's Cognitive Research Enterprises, Inc. (formerly known as the Blanchette Rockefeller Neurosciences Institute, or BRNI) ("CRE") licensing agreement, and the ability to raise capital to achieve strategic objectives.

CRE has entered into a material transfer agreement with the National Cancer Institute of the National Institutes of Health ("NCI"), pursuant to which the NCI has agreed to supply bryostatin required for the Company's pre-clinical research and clinical trials. This agreement does not provide for a sufficient amount of bryostatin to support the completion of all of the clinical trials that the Company is required to conduct in order to seek U.S. Food and Drug Administration ("FDA") approval. Therefore, CRE or the Company would have to enter into one or more subsequent agreements with the NCI for the supply of additional amounts of bryostatin. If CRE or the Company were unable to secure such additional agreements, or if the NCI otherwise discontinues the supply, the Company would have to either secure another source of bryostatin or discontinue its efforts to develop and commercialize Bryostatin-1 for the treatment of AD. In June 2020, the Company entered into a supply agreement (the "Supply Agreement") with BryoLogyx Inc. ("BryoLogyx"), pursuant to which BryoLogyx agreed to be the Company's exclusive supplier of synthetic bryostatin. Pursuant to the terms of the Supply Agreement, the Company received its initial order of one gram of synthetic bryostatin. See Note 3.

Note 2 – Summary of Significant Accounting Policies:

Basis of Presentation:

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial reporting and with the instructions to Form 10-Q and Article 10 of Regulation S-X. In the opinion of management, the unaudited condensed financial statements included herein contain all adjustments necessary to present fairly the Company's financial position and the results of its operations and cash flows for the interim periods presented. Such adjustments are of a normal recurring nature. The results of operations for the three and nine months ended September 30, 2024 may not be indicative of results for the full year. These unaudited condensed financial statements should be read in conjunction with the audited financial statements and the notes to those statements for the year ended December 31, 2023 included in the Company's Annual Report on Form 10-K filed with the SEC on April 1, 2024.

The Company is an emerging growth company as the term is used in The Jumpstart Our Business Startups Act, enacted on April 5, 2012, and has elected to comply with certain reduced public company reporting requirements, however, the Company may adopt accounting standards based on the effective dates for public entities.

Use of Estimates:

The preparation of financial statements in conformity with GAAP requires management to make significant estimates that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of expenses during the reporting period. Management evaluates its estimates on an ongoing basis using historical experience and other factors, including the general economic environment and actions it may take in the future. The Company adjusts such estimates when facts and circumstances dictate. However, these estimates may involve significant uncertainties and judgments and cannot be determined with precision. In addition, these estimates are based on management's best judgment at a point in time and as such these estimates may ultimately differ from actual results.

Comprehensive Income (Loss)

The Company follows The Company follows Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 220 in reporting comprehensive income (loss). Comprehensive income (loss) is a more inclusive financial reporting methodology that includes disclosure of certain financial information that historically has not been recognized in the calculation of net income (loss). Since the Company has items of other comprehensive income (loss), comprehensive income (loss) has been reflected in the Company's financial statements.

Net Earnings or Loss per Share:

Net earnings or loss per share is computed by dividing net income or loss by the weighted-average number of shares of Common Stock outstanding during the period, excluding shares subject to redemption or forfeiture. The Company presents basic and diluted net earnings or loss per share. Diluted net earnings or loss per share reflect the actual weighted average of shares of Common Stock issued and outstanding during the period, adjusted for potentially dilutive securities outstanding. Potentially dilutive securities are excluded from the computation of the diluted net earnings or loss per share if their inclusion would be anti-dilutive.

As all potentially dilutive securities are anti-dilutive as of September 30, 2024 and 2023, diluted net loss per share is the same as basic net loss per share for the three and nine months ended September 30, 2024 and 2023.

The weighted average dilutive securities that have been excluded from the calculation of diluted net loss per share for the three and nine months ended September 30, 2024 and 2023 respectively, because to do so would be anti-dilutive (in Common Stock equivalents), are as follows:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2024	2023	2024	2023
Common Stock Options	32,751	29,674	31,718	28,650
Convertible Preferred Stock	1,253,299	54,333	1,253,299	54,333
Common Stock Warrants	433,780	287,197	384,643	287,197
Total	<u>1,719,830</u>	<u>371,204</u>	<u>1,669,660</u>	<u>370,180</u>

Cash and Cash Equivalents and Concentration of Credit Risk:

The Company considers all highly liquid cash investments with an original maturity of three months or less when purchased to be cash equivalents. At September 30, 2024, the Company's cash balances that exceed the current insured amounts under the Federal Deposit Insurance Corporation ("FDIC") were approximately \$0.9 million. In addition, approximately \$18.7 million included in cash and cash equivalents were invested in a money market fund and in U.S. treasury bills, which is not insured under the FDIC.

Investment in Debt Securities

The Company's convertible note receivable was determined to be an available-for-sale debt security under ASC 320, *Investments*, which was initially recorded at fair value with unrealized holding gains and losses reported in other comprehensive income (loss) at each reporting period. The Company estimates the fair value of the convertible note receivable using the income approach, which uses as inputs the fair value of debtor's common stock and estimates for the equity volatility and volume volatility of debtor's common stock, the time to expiration of the convertible note, the discount rate, the stated interest rate compared to the current market rate, the risk-free interest rate for a period that approximates the time to expiration, and probability of default. Therefore, the estimate of expected future volatility is based on the actual volatility of debtor's common stock and historical volatility of debtor's common stock utilizing a lookback period consistent with the time to expiration. The time to expiration is based on the contractual maturity date. The risk-free interest rate is 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 is estimated using the S&P Global default rate for companies with a similar credit rating to debtor's.

Fair Value of Financial Instruments:

The carrying amounts reflected in the balance sheets for prepaid expenses and payables approximate fair value due to the short maturities of these instruments. The carrying amounts for available for sale debt security, warrant liability and derivative liability approximate fair value based on level 3 of the fair value hierarchy.

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy:

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

Level 2 — Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable markets.

Level 3 — Unobservable inputs which are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

Fixed Assets and Leases:

The Company has two leases, one of which has a remaining term of nine months with the other having a remaining term of two months, during the respective reporting periods. The Company has deemed the leases immaterial and has not recorded it as an obligation on the balance sheet nor a right-of-use asset. The total future expense relating to these leases is approximately \$52,000 per year.

Fixed assets are stated at cost less accumulated depreciation. Depreciation is computed on a straight line basis over the estimated useful life of the asset, which is deemed to be between three and ten years.

Research and Development Costs:

All research and development costs, including costs to maintain or expand the Company's patent portfolio licensed from CRE are expensed when incurred. Non-refundable advance payments for research and development are capitalized because the right to receive those services represents an economic benefit. Such capitalized advances will be expensed when the services occur and the economic benefit is realized. There were no capitalized research and development services, other than non-refundable advance payments as mentioned below for The Cleveland Clinic Foundation ("Cleveland Clinic"), at September 30, 2024 and December 31, 2023.

Income Taxes:

The Company accounts for income taxes using the asset and liability approach which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and amounts reportable for income tax purposes under the "Separate return method." Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized.

The Company applies the provisions for accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The Company has determined that there are no significant uncertain tax positions requiring recognition in the accompanying financial statements. The tax period that is subject to examination by major tax jurisdictions is generally three years from the date of filing.

The Company had federal operating loss carryforwards for income tax purposes of approximately \$ 98.2 million for the period from October 31, 2012 (inception) through September 30, 2024. The net operating loss carryforwards and other deferred tax assets resulted in Federal and state deferred tax assets of approximately \$31.5 million at September 30, 2024. Income tax effects of share-based payments are recognized in the financial statements for those awards that will normally result in tax deductions under existing tax law. However, the deferred tax asset is offset by a full valuation allowance.

The Company may be subject to significant U.S. federal income tax-related liabilities with respect to the Spin-Off if there is a determination that the Spin-Off is taxable for U.S. federal income tax purposes. In connection with the Spin-Off, the Company believes that, among other things, the Spin-Off should qualify as a tax-free transaction for U.S. federal income tax purposes under Section 355 and Section 368(a)(1)(D) of the Internal Revenue Code of 1986 (the "Code"). If the conclusions of the tax opinions are not correct, or if the Spin-Off is otherwise ultimately determined to be a taxable transaction, the Company would be liable for U.S. federal income tax related liabilities. Pursuant to the Separation and Distribution Agreement and the Tax Matters Agreement, Neurotrope agreed to indemnify Synaptogenix for certain liabilities, and Synaptogenix agreed to indemnify Neurotrope for certain liabilities, in each case for uncapped amounts. Indemnities that Synaptogenix may be required to provide Neurotrope are not subject to any cap, may be significant and could negatively impact Synaptogenix's business, particularly with respect to indemnities provided in the Tax Matters Agreement. Third parties could also seek to hold Synaptogenix responsible for any of the liabilities that Neurotrope has agreed to retain. Further, the indemnity from Neurotrope may not be sufficient to protect Synaptogenix against the full amount of such liabilities, and Neurotrope may not be able to fully satisfy its indemnification obligations. Moreover, even if Synaptogenix ultimately succeeds in recovering from Neurotrope any amounts for which Synaptogenix is held liable, Synaptogenix may be temporarily required to bear these losses. At September 30, 2024 and as of the financial statement issuance date, the Company does not have any indemnification liabilities.

Under Section 382 of the Code, as amended, changes in the Company's ownership may limit the amount of its net operating loss carryforwards that could be utilized annually to offset future taxable income, if any. This limitation would generally apply in the event of a cumulative change in ownership of the Company of more than 50% within a three-year period. In addition, the significant historical operating losses incurred by the Company may limit the amount of its net operating loss carryforwards that could be utilized annually to offset future taxable income, if any. The Company believes that operating loss carryforwards may be limited under Section 382 limitations although Section 382 studies have not been conducted to determine the actual limitations.

The Company has concluded that there are no significant uncertain tax positions requiring recognition in the accompanying financial statements. The tax period that is subject to examination by major tax jurisdictions is generally three years from the date of filing.

Recently Issued Accounting Pronouncements Adopted and Not Yet Adopted:

As of September 30, 2024 and for the nine months then ended, there were no recently issued accounting standards adopted or not yet adopted which would have a material effect on the Company's financial statements.

Note 3 – Collaborative Agreements and Commitments:

Stanford License Agreements

On May 12, 2014, the Company entered into a license agreement (the "Stanford Agreement") with The Board of Trustees of The Leland Stanford Junior University ("Stanford"), pursuant to which Stanford has granted to the Company a revenue-bearing, world-wide right and exclusive license, with the right to grant sublicenses (on certain conditions), under certain patent rights and related technology for the use of bryostatin structural derivatives, known as "bryologs," for use in the treatment of central nervous system disorders, lysosomal storage diseases, stroke, cardio protection and traumatic brain injury, for the life of the licensed patents. The Company is required to use commercially reasonable efforts to develop, manufacture and sell products ("Licensed Products") in the Licensed Field of Use (as defined in the Stanford Agreement) during the term of the licensing agreement which expires upon the termination of the last valid claim of any licensed patent under this agreement. In addition, the Company must meet specific product development milestones, and upon meeting such milestones, make specific milestone payments to Stanford. The Company must also pay Stanford royalties of 3% of net sales, if any, of Licensed Products (as defined in the Stanford Agreement) and milestone payments of up to \$3.7 million dependent upon stage of product development. As of September 30, 2024, no royalties nor milestone payments have been required.

On January 19, 2017, the Company entered into a second license agreement with Stanford, pursuant to which Stanford has granted to the Company a revenue-bearing, world-wide right and exclusive license, with the right to grant sublicenses (on certain conditions), under certain patent rights and related technology for the use of "Bryostatin Compounds and Methods of Preparing the Same," or synthesized bryostatin, for use in the treatment of neurological diseases, cognitive dysfunction and psychiatric disorders, for the life of the licensed patents. The Company paid Stanford \$70,000 upon executing the license and is obligated to pay an additional \$10,000 annually as a license maintenance fee. In addition, based upon certain milestones that include product development and commercialization, the Company will be obligated to pay up to an additional \$2.1 million and between 1.5% and 4.5% royalty payments on certain revenues generated by the Company relating to the licensed technology. On November 9, 2021, the Company revised the existing licensing agreement with Stanford. The revisions extended all the required future product development and commercialization milestones. The Company is currently in full compliance with the revised agreement and is moving forward on its commitments. As of September 30, 2024, no royalties nor milestone payments have been earned or made.

The Company has advanced the development of synthetic bryostatin by demonstrating the equivalence of the synthetic to the natural bryostatin product. The estimated cost to initiate and produce sufficient quantities of the synthetic bryostatin drug product is approximately \$1.5 million. The Company is evaluating production alternatives at this time.

Mt. Sinai License Agreement

On July 14, 2014, the Company entered into an Exclusive License Agreement (the "Mount Sinai Agreement") with the Icahn School of Medicine at Mount Sinai ("Mount Sinai"). Pursuant to the Mount Sinai Agreement, Mount Sinai granted the Company (a) a revenue-bearing, world-wide right and exclusive license, with the right to grant sublicenses (on certain conditions), under Mount Sinai's interest in certain joint patents held by the Company and Mount Sinai (the "Joint Patents") as well as in certain results and data (the "Data Package") and (b) a non-exclusive license, with the right to grant sublicenses on certain conditions, to certain technical information, both relating to the diagnostic, prophylactic or therapeutic use for treating diseases or disorders in humans relying on activation of Protein Kinase C Epsilon ("PKC ϵ "), which includes Niemann-Pick Disease (the "Mount Sinai Field of Use"). The Mount Sinai Agreement allows the Company to research, discover, develop, make, have made, use, have used, import, lease, sell, have sold and offer certain products, processes or methods that are covered by valid claims of Mount Sinai's interest in the Joint Patents or an Orphan Drug Designation Application covering the Data Package ("Mount Sinai Licensed Products") in the Mount Sinai Field of Use (as such terms are defined in the Mount Sinai Agreement).

The Company is required to pay Mt. Sinai milestone payments of \$ 2.0 million upon approval of a new drug application ("NDA") in the United States and an additional \$1.5 million for an NDA approval in the European Union or Japan. In addition, the Company is required to pay Mt. Sinai royalties on net sales of licensed product of 2.0% for up to \$250 million of net sales and 3.0% of net sales over \$250 million. Since inception, the Company has paid Mt. Sinai approximately \$ 210,000 consisting of licensing fees of \$ 135,000 plus development costs and patent fees of approximately \$75,000. As of September 30, 2024, no royalties nor milestone payments have been required.

Agreements with BryoLogyx

On June 9, 2020, the Company entered into a supply agreement (the "Supply Agreement") with BryoLogyx Inc. ("BryoLogyx"), pursuant to which BryoLogyx agreed to serve as the Company's exclusive supplier of synthetic bryostatin. Pursuant to the terms of the Supply Agreement, the Company placed an initial order and subsequently received one gram of current good manufacturing practice ("cGMP") synthetic bryostatin as an active pharmaceutical ingredient to be used in a drug product ("API"). The Company may place additional orders for API beyond the initial order by making a written request to BryoLogyx no later than six months prior to the requested delivery date. The Company is not currently using synthetic bryostatin for its current Phase 2 clinical trial and will determine when to incorporate the synthetic into the clinical trial process.

In connection with the Supply Agreement, on June 9, 2020, the Company entered into a transfer agreement (the "Transfer Agreement") with BryoLogyx. Pursuant to the terms of the Transfer Agreement, the Company agreed to assign and transfer to BryoLogyx all of the Company's right, title and interest in and to that certain Cooperative Research and Development Agreement, dated as of January 29, 2019 (the "CRADA"), by and between the Company and the U.S. Department of Health and Human Services, as represented by the NCI, under which Bryostatin-1's ability to modulate CD22 in patients with relapsed/refractory CD22+ disease has been evaluated to date. Pursuant to guidance provided by NCI, the Company CRADA has been cancelled and BryoLogyx has initiated a request for a new CRADA in its name. BryoLogyx will be filing its own investigational new drug application ("IND") for CD22 with the FDA. As consideration for the transfer of rights to the CRADA, BryoLogyx has agreed to pay to the Company 2% of the gross revenue received in connection with the sale of bryostatin products, up to an aggregate payment amount of \$1 million. No such revenues have been earned as of September 30, 2024.

Nemours Agreement

On September 5, 2018, the Company announced a collaboration with Nemours A.I. DuPont Hospital ("Nemours"), a premier U.S. children's hospital, to initiate a clinical trial in children with Fragile X syndrome, a genetic disorder. In addition to the primary objective of safety and tolerability, measurements will be made of working memory, language and other functional aspects such as anxiety, repetitive behavior, executive functioning, and social behavior. On August 5, 2021, the Company announced its memorandum of understanding with Nemours to initiate a clinical trial using Bryostatin-1, under Orphan Drug Status, to treat Fragile X. The Company intends to provide the Bryostatin-1 and obtain the IND, and Nemours intends to provide the clinical site and attendant support for the trial. The Company and Nemours, jointly, will develop the trial protocol. The Company estimates its total trial and IND cost to be approximately \$2.0 million. As of September 30, 2024, the Company has incurred cumulative expenses associated with this agreement of approximately \$100,000.

The Company has filed an IND with the FDA. The FDA has placed the development of the IND on clinical hold pending completion of further analytics relating to drug pharmacokinetics and pharmacodynamics. The Company is currently evaluating its plans to advance Fragile X development.

Cleveland Clinic

On February 23, 2022, the Company announced its collaboration with Cleveland Clinic to pursue possible treatments for Multiple Sclerosis ("MS"), and on July 19, 2023, the Company announced that it had entered into an agreement with Cleveland Clinic to conduct a Phase 1 trial of Bryostatin-1 in MS. Cleveland Clinic will manage the clinical trial's implementation, including an IND submission to the FDA and patient enrollment. Cleveland Clinic has enrolled three subjects and has dosed two to - date, with the total planned enrollment in the MS Trial of 20 subjects. The total estimated costs associated with this collaboration are approximately \$ 2.0 million. As of September 30, 2024, the Company has incurred expenses owed to Cleveland Clinic of approximately \$590,000 of which approximately \$0 was expensed during this current quarter.

LSU Health New Orleans' Neuroscience Center of Excellence ("LSU Health")

Effective June 20, 2024, the Company signed a collaboration agreement with the Louisiana State University Health Sciences Center ("LSU Health") to pursue pre-clinical testing of the Company's polyunsaturated fatty acid ("PUFA") analogs as a treatment for spinal cord injury ("SCI"). The Company also announced that the US Patent and Trademark Office (USPTO) recently issued US Patent No. 12,016,837 titled 'Halogenated Esters of Cyclopropanated Unsaturated Fatty Acids for Use in the Treatment of Neurodegenerative Diseases,' covering its family of analogs. Synaptogenix holds exclusive rights to its PUFA analogs pursuant to a licensing agreement with Cognitive Research Enterprises, Inc. ("CRE"), formerly known as the Blanchette Rockefeller Neurosciences Institute. The studies will compare the analogs with Bryostatin in SCI. The total estimated costs associated with this collaboration are approximately \$200,000. As of September 30, 2024, the Company has paid amounts owed to LSU Health and its affiliates of \$ 50,000 of which \$0 was expensed during the three months ended September 30, 2024.

Strategic Investment in Debt and Equity Securities of Cannasoul

On October 31, 2023, the Company entered into a share purchase agreement (the "Purchase Agreement") with Cannasoul Analytics Ltd. ("Cannasoul"), pursuant to which the Company agreed to purchase from Cannasoul (i) 12,737 shares of Cannasoul's Series A preferred shares (the "Preferred Shares"), representing 5% of Cannasoul's issued and outstanding share capital, at a price of \$44.1550 per Preferred Share for \$562,402 and (ii) a convertible preferred note in an aggregate amount of up to \$ 1,437,598 (the "Initial Convertible Note") convertible into 32,648 Preferred Shares. The Preferred Shares are convertible (i) any time after the date of issuance at the Company's option and (ii) automatically upon the earlier of a payment default, the consummation of Cannasoul's IPO, or the majority consent of the majority holders of the Preferred Shares.

Additionally, the Company agreed to purchase up to four additional convertible preferred notes in a total amount of up to approximately \$2,000,000 (or approximately \$500,000 per convertible preferred note), subject to Cannasoul achieving certain revenue and expense goals (the "Milestones") over the next four quarters (the "Milestone Convertible Notes" and, together with the Initial Convertible Note, the "Cannasoul Convertible Notes") as set forth in the Purchase Agreement. The Company's purchase of the Preferred Shares, the Initial Convertible Notes and the Milestone Convertible Notes is herein referred to as the "Investment." If Cannasoul fails to achieve a Milestone, the Company will not be obligated to purchase the applicable Milestone Convertible Note. If Cannasoul achieves a Milestone and the Company fails to purchase the applicable Milestone Convertible Note, Cannasoul will have the right to convert all the Company's Preferred Shares into Cannasoul's ordinary shares and the Company will lose certain board appointment rights and certain rights in Cannasoul's subsidiaries. In January and June 2024, the Company purchased Milestone Convertible Notes for \$500,000 and \$500,000, respectively, following Cannasoul's achievement of a Milestone.

In connection with the Purchase Agreement, Cannasoul adopted amended and restated articles of incorporation (the "Cannasoul Charter"). Pursuant to the Cannasoul Charter, the Company has a number of rights as investor, including (i) the right to appoint and dismiss three of the seven members of Cannasoul's board of directors and veto power with respect to a fourth member, (ii) preemptive rights to participate pro rata in any pre-initial public offering financings by Cannasoul, (iii) rights of first refusal with respect to transfers of Cannasoul ordinary shares by other investors, (iv) rights of co-sale with respect to proposed sales or transfers of Cannasoul ordinary shares by certain key investors, (v) veto rights with respect to certain major transactions, any amendment to the Cannasoul Charter, approval of Cannasoul's budget and other items.

It was determined that Cannasoul is considered a variable interest entity ("VIE"), but the Company lacks the power to direct the activities that most significantly influence the VIE's economic performance. As such, the Company is not the primary beneficiary of the VIE and is not required to consolidate Cannasoul in accordance with ASC 810-10-25-38A.

The Company's investment in the Preferred Shares represents an investment in an equity security in accordance with ASC 320. The Preferred Shares are convertible at any time after the date of issuance, automatically upon a payment default, an IPO, or the written consent of the holders of a majority of the Preferred Shares. The conversion price is subject to traditional anti-dilution adjustments. The Company accounts for its investment in Cannasoul's Preferred Shares under the equity method of accounting as it was determined the Company has significant influence over Cannasoul based on its board representation and other veto rights per ASC 323-10-15-6 to 8. The Company has elected to record the equity in earnings of the equity method investment on a three-month lag which is recognized in other comprehensive income. As a result, the Company recorded losses of \$12,025 and \$30,475 on its equity method investment during the three and nine months ended September 30, 2024, respectively.

The Cannasoul Convertible Notes are not traded in active markets and the fair value was determined using a probability weighted scenario-based model. The Cannasoul Convertible Notes are accounted for as an available-for-sale debt security based on "Level 3" inputs, which consist of unobservable inputs and reflect management's estimates of assumptions that market participants would use in pricing the asset (i.e., implied market rate, risk free rate, share price, and probability of scenarios). Holding gains and losses are recorded in other comprehensive income (loss).

Below is a summary of activity for the Cannasoul Convertible Notes as of September 30, 2024:

Balance of Cannasoul Convertible Notes as of January 1, 2023	\$	—
Issued		1,437,598
Change in fair value		902
Balance of Cannasoul Convertible Notes as of December 31, 2023	\$	1,438,500
Issued		1,000,000
Change in fair value		4,800
Balance of Cannasoul Convertible Notes as of September 30, 2024	\$	2,443,300

Cognitive Research Enterprises, Inc. ("CRE")

Effective October 31, 2012, the Company executed a Technology License and Services Agreement (the "TLSA") with CRE, a related party, and NRV II, LLC ("NRV II"), another affiliate of CRE, which was amended by Amendment No. 1 to the TLSA as of August 21, 2013, as amended and restated on February 4, 2015 (the "CRE License Agreement"). Pursuant to the CRE License Agreement, CRE and NRV II provide research services and have granted the Company the exclusive and nontransferable world-wide, royalty-bearing right, with a right to sublicense (in accordance with the terms and conditions described below), under CRE's and NRV II's respective right, title and interest in and to certain patents and technology owned by CRE or licensed to NRV II by CRE as of or subsequent to October 31, 2012, to develop, use, manufacture, market, offer for sale, sell, distribute, import and export certain products or services for therapeutic applications for AD and other cognitive dysfunctions in humans or animals (the "Field of Use"). Additionally, the CRE License Agreement specifies that all patents that issue from a certain patent application shall constitute licensed patents and all trade secrets, know-how and other confidential information claimed by such patents constitute licensed technology under the CRE License. The CRE License Agreement terminates on the later of the date (a) the last of the licensed patent expires, is abandoned, or is declared unenforceable or invalid or (b) the last of the intellectual property enters the public domain.

After Neurotrope's initial Series A Stock financing, the CRE License Agreement required the Company to enter into scope of work agreements with CRE as the preferred service provider for any research and development services or other related scientific assistance and support services. There were no such statements of work agreements entered into during the year ended December 31, 2023 or during the nine months ended September 30, 2024.

In addition, on November 10, 2018, the Company and CRE entered into a second amendment (the "Second Amendment") to the TLSA pursuant to which CRE granted certain patent prosecution and maintenance rights to the Company. Under the Second Amendment, the Company will have the sole and exclusive right and the obligation, to apply for, file, prosecute and maintain patents and applications for the intellectual property licensed to the Company, and pay all fees, costs and expenses related to the licensed intellectual property.

Note 4 – Related Party Transactions:

On August 4, 2016, Neurotrope entered into a consulting agreement with SM Capital Management, LLC ("SMCM"), a limited liability company owned and controlled by the Company's Chairman of the Board, Mr. Joshua N. Silverman (the "Consulting Agreement"). Pursuant to the Consulting Agreement, SMCM shall provide consulting services which shall include, but not be limited to, providing business development, financial communications and management transition services, for a one-year period, subject to annual review thereafter. SMCM's annual consulting fee is \$120,000, payable by the Company in monthly installments of \$ 10,000. This contract was assigned to the Company as of December 1, 2020. For the three and nine months ended September 30, 2024 and 2023, \$30,000 and \$90,000, respectively, is reflected in the Company's statements of comprehensive loss, respectively.

Note 5 – Other Commitments:

Clinical Trial Services Agreements

On July 23, 2020, the Company entered into a services agreement with WCT (the “2020 Services Agreement”). The 2020 Services Agreement related to services for the current Phase 2 clinical trial assessing the safety, tolerability and long-term efficacy of Bryostatin-1 in the treatment of moderately severe AD subjects not receiving memantine treatment (the “2020 Study”). On January 22, 2022, the Company executed a change order with WCT to accelerate trial subject recruitment totaling approximately \$1.4 million. In addition, on February 10, 2022, the Company signed an additional agreement with a third-party vendor to assist with the increased trial recruitment retention totaling approximately \$1.0 million which was subsequently canceled with no charges incurred by the Company. The updated total estimated budget for these trial services, including pass-through costs, was approximately \$11.0 million. As noted below, Neurotrope was granted a \$2.7 million award from the National Institutes of Health, which award was used to support the Phase 2 Study, resulting in an estimated net budgeted cost of the Phase 2 Study to Neurotrope of \$9.3 million.

The Company was awarded a \$2.7 million grant from the NIH, which will be used to support the 2020 Study, resulting in an estimated net budgeted cost of the 2020 Study to the Company of \$8.3 million. The NIH grant provided for funds in the first year, which began in April 2020, of approximately \$1.0 million and funding in year two, which began April 2021, of approximately \$ 1.7 million. As of February 22, 2022, virtually all of the NIH grant had been received and offset against the clinical trial costs. The Company incurred approximately \$11.2 million of cumulative expenses associated with the current Phase 2 clinical trial as of September 30, 2024. Of the total \$11.2 million incurred for the trial as of September 30, 2024, \$ 0 and \$0.1 million is reflected in the statement of comprehensive loss for the three months ended September 30, 2024 and 2023, respectively and \$0 and \$0.5 million is reflected in the statement of comprehensive loss for the nine months ended September 30, 2024 and 2023, respectively. The 2020 Study was completed in December 2023.

On May 12, 2022, the Company entered into a services agreement with WCT (the “2022 Services Agreement”). The 2022 Services Agreement related to services for a Phase 2 “open label,” dose ranging study, clinical trial assessing the safety, tolerability and efficacy of Bryostatin-1 administered via infusion in the treatment of moderately severe to severe AD subjects not receiving memantine treatment (the “2022 Study”).

Pursuant to the terms of the 2022 Services Agreement, WCT provided services to enroll approximately twelve 2022 Study subjects. The first 2022 Study site was initiated during the third quarter of 2022. The total estimated budget for the services, including pass-through costs, is currently approximately \$2.0 million. The Company terminated the 2022 Services Agreement in December 2022.

The Company incurred approximately \$1.6 million of cumulative expenses associated with the current 2022 Study as of September 30, 2024. Of the total \$1.6 million incurred for the trial as of September 30, 2024, \$ 0 and approximately \$14,000 is reflected in the statement of comprehensive loss for the three months ended September 30, 2024 and 2023, respectively, and \$0 and approximately \$171,000 is reflected in the statement of comprehensive loss for the nine months ended September 30, 2024 and 2023, respectively.

Employment Agreements

On December 7, 2020, the Company entered into an offer letter (as amended on August 4, 2022, June 16, 2023 and June 7, 2024, the “Offer Letter”) with Alan J. Tuchman, M.D., pursuant to which Dr. Tuchman agreed to serve as the Company's Chief Executive Officer, commencing on December 7, 2020. In addition, in connection with his appointment as the Company's Chief Executive Officer, Dr. Tuchman was appointed to the board of directors of the Company. Dr. Tuchman receives an annual base salary of \$222,000, with an annual discretionary bonus of up to 50% of his base salary then in effect. The term of Dr. Tuchman's employment pursuant to the Offer Letter is through December 7, 2024, with automatic monthly renewals thereafter unless earlier terminated in accordance with the terms of the Offer Letter.

Other Commitments and Agreements

See Notes 3 and 4 for Collaboration and License Agreement related commitments.

Contingencies

Pursuant to the Separation Agreement and Tax Matters Agreement with Neurotrope, Neurotrope agreed to indemnify Synaptogenix for certain liabilities, and Synaptogenix agreed to indemnify Neurotrope for certain liabilities, in each case for uncapped amounts. Indemnities that Synaptogenix may be required to provide Neurotrope are not subject to any cap, may be significant and could negatively impact Synaptogenix's business, particularly with respect to indemnities provided in the Tax Matters Agreement. Third parties could also seek to hold Synaptogenix responsible for any of the liabilities that Neurotrope has agreed to retain. Further, the indemnity from Neurotrope may not be sufficient to protect Synaptogenix against the full amount of such liabilities, and Neurotrope may not be able to fully satisfy its indemnification obligations. Moreover, even if Synaptogenix ultimately succeeds in recovering from Neurotrope any amounts for which Synaptogenix is held liable, Synaptogenix may be temporarily required to bear these losses. As of the reporting date, there are no claims relating to the indemnification agreement.

Note 6 – Stockholders' Equity:

The Company's certificate of incorporation authorizes it to issue 150,000,000 shares of Common Stock and 1,000,000 shares of preferred stock, par value \$0.0001 per share.

The holders of Common Stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends at such times and in such amounts as the Board from time to time may determine. To date, the Company has not paid dividends on its Common Stock. Holders of Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. There is no cumulative voting of the election of directors then standing for election. The Common Stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of the Company, the assets legally available for distribution to stockholders are distributable ratably among the holders of Common Stock after payment of liabilities, accrued dividends and liquidation preferences, if any. Each outstanding share of Common Stock is duly and validly issued, fully paid and non-assessable.

November 2022 Private Placement

On November 17, 2022, the Company entered into a Securities Purchase Agreement (as amended on May 11, 2023, the "Series B Purchase Agreement") with certain accredited investors (the "Series B Investors"), pursuant to which it agreed to sell to the Series B Investors (i) an aggregate of 15,000 shares of the Company's newly-designated Series B convertible preferred stock with a stated value of \$1,000 per share (the "Series B Preferred Stock"), initially convertible into up to 77,420 shares of Common Stock (the "Series B Preferred Shares"), and (ii) warrants (the "Series B Warrants") to acquire up to an aggregate of 77,420 shares of Common Stock (the "Series B Warrant Shares") (collectively, the "Series B Offering").

The Series B Preferred Stock matured on September 9, 2024, and no shares of Series B Preferred Stock remain outstanding. The terms of the Series B Preferred Stock were as set forth in the Certificate of Designations for the Series B Preferred Stock (as amended on March 17, 2023, May 12, 2023, September 22, 2023 and September 3, 2024, the "Series B Certificate of Designations"). The Series B Preferred Stock was convertible into Series B Preferred Shares at the election of the holder at any time at an initial conversion price of \$193.75 (as adjusted from time to time pursuant to the terms of the Series B Certificate of Designations, the "Series B Conversion Price"). The Series B Conversion Price was subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series B Conversion Price (subject to certain exceptions). The Company was required to redeem the Series B Preferred Stock in 15 equal monthly installments, commencing on June 1, 2023. The amortization payments due upon such redemption were payable, at the Company's election, in cash, or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Series B Conversion Price then in effect and (ii) the greater of (A) a 15% discount to the average of the three lowest closing prices of the Common Stock during the thirty trading day period immediately prior to the date the amortization payment is due or (B) the lower of \$31.25 and \$4.30, which equals 20% of the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) on April 14, 2023, the date of receipt of Nasdaq Stockholder Approval (as defined below); provided that if the amount set forth in clause B is the lowest effective price, the Company would be required to pay the amortization payment in cash. The Company had the ability to require holders to convert their Series B Preferred Stock into Series B Preferred Shares if the closing price of the Common Stock exceeded \$290.625 per share for 20 consecutive trading days and the daily trading volume of the Common Stock exceeded 4,000 shares per day during the same period and certain equity conditions described in the Series B Certificate of Designations were satisfied.

On March 17, 2023, the Company filed an amendment (the “First CoD Amendment”) to the Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which it amended the terms of the Series B Preferred Stock by revising the definition of “floor price” for purposes of calculating amortization payments, extending the date for the first required amortization payments, extending the deadline for stockholder approval and extending the maturity date to August 31, 2024. On May 12, 2023, the Company filed an amendment (the “Second CoD Amendment”) to the Series B Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which the Company amended the terms of the Series B Preferred Stock by removing all references to the “Make-Whole Amount”. In connection with the Second CoD Amendment, on May 11, 2023, the Company entered into an amendment to the Series B Purchase Agreement pursuant to which it agreed to extend the investors’ right of participation in a subsequent financing until the one year anniversary following the later of (x) such time that no shares of Series B Preferred Stock are outstanding and (y) the maturity date of the Series B Preferred Stock. On September 22, 2023, the Company filed an amendment (the “Third CoD Amendment”) to the Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which the Company amended the terms of the Series B Preferred Stock by providing that the Company and Series B Investors shall be permitted to mutually agree, in connection with any waiver of an Equity Conditions Failure (as defined in the Series B Certificate of Designations), as to (i) whether the monthly amortization payments made to the Series B Investors will be made in cash or shares of Common Stock, (ii) the methodology for calculating any applicable true-up shares required to be paid in connection with an amortization payment (including whether such true-up shares will be paid in cash or shares of Common Stock) and for calculating the conversion price in connection with any accelerated conversions, and (iii) whether any premium will apply in connection with any payment of true-up shares in cash instead of shares of Common Stock, subject to certain limitations as set forth in the Third CoD Amendment. On September 3, 2024, the Company filed an amendment to the Series B Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which the Company extended the maturity date to September 9, 2024, subject to further extension pursuant to the terms of the Certificate of Designations.

The holders of the Series B Preferred Stock were entitled to dividends of 7% per annum, compounded monthly, which were payable in cash or shares of Common Stock at the Company’s option, in accordance with the terms of the Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Certificate of Designations), the Series B Preferred Stock would have accrued dividends at the rate of 15% per annum. The holders of Series B Preferred Stock had no voting rights on account of the Series B Preferred Stock, other than with respect to certain matters affecting the rights of the Series B Preferred Stock.

Notwithstanding the foregoing, the Company’s ability to settle conversions and make amortization payments using shares of Common Stock was subject to certain limitations set forth in the Series B Certificate of Designations, including a limit on the number of shares that may be issued until the Company’s stockholders approved the issuance of more than 19.9% of the Company’s outstanding shares of Common Stock in accordance with Nasdaq listing standards (the “Nasdaq Stockholder Approval”). The Company received Nasdaq Stockholder Approval at the Company’s special meeting of stockholders held on April 14, 2023. Further, the Series B Certificate of Designations contained a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of, or as part of any amortization payment under, the Series B Certificate of Designations or Series B Warrants.

The Series B Certificate of Designations included certain Triggering Events (as defined in the Series B Certificate of Designations), including, among other things, the failure to file and maintain an effective registration statement covering the sale of the holder’s securities registrable pursuant to the 2024 Registration Rights Agreement (defined below) and the Company’s failure to pay any amounts due to the holders of the Series B Preferred Stock when due. In connection with a Triggering Event, each holder of Series B Preferred Stock would be able to require the Company to redeem in cash any or all of the holder’s Series B Preferred Stock at a premium set forth in the Series B Certificate of Designations.

The Company was subject to certain affirmative and negative covenants regarding the incurrence of indebtedness, acquisition and investment transactions, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends (other than dividends pursuant to the Series B Certificate of Designations), distributions or redemptions, and the transfer of assets, among other matters.

The Series B Warrants are exercisable for Series B Warrant Shares at an exercise price of \$ 2.8586 per share (as adjusted from time to time pursuant to the terms of the Series B Warrants, the “Series B Exercise Price”). The Series B Exercise Price was reduced based upon the Reverse Stock Split and the Series C Private Placement (see below). The Series B Warrants expire five years from the date of issuance. The Series B Exercise Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a “full ratchet” basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series B Exercise Price (subject to

certain exceptions). There is no established public trading market for the Series B Warrants and the Company does not intend to list the Series B Warrants on any national securities exchange or nationally recognized trading system.

In connection with the Series B Purchase Agreement, the Company and the Series B Investors entered into a Registration Rights Agreement (the "Series B Registration Rights Agreement") on November 17, 2022. Under the terms of the Series B Registration Rights Agreement, the Company agreed to register 200% of the Series B Preferred Shares, the Series B Warrant Shares and the shares of Common Stock issuable as amortization payments as well as any shares of Common Stock paid as dividends. The Company filed a registration statement for the resale of such securities on December 16, 2022. The Company also agreed to other customary obligations regarding registration, including indemnification and maintenance of the effectiveness of the registration statement.

In connection with the Series B Offering, pursuant to an Engagement Letter, between the Company and Catalyst Securities LLC (the "Series B Placement Agent"), the Company paid the Series B Placement Agent (i) a cash fee equal to 7% of the gross proceeds from any sale of securities in the Series B Offering and (ii) warrants to purchase shares of Common Stock equal to 3% of the number of shares of Common Stock that the Series B Preferred Shares are initially convertible into, with an exercise price of \$2.8586 per share, pursuant to the above, and a five-year term.

During the three and nine months ended September 30, 2024, the Company redeemed \$ 0 and \$6,000,000, respectively, of the Series B Preferred Stock and \$274,140 and \$396,640, respectively of accrued dividends by issuing 100,000 and 374,219 shares, respectively, of Common Stock through installment conversions and proportionately relieved \$0 and \$4,911,312 of discount, respectively, related to the redeemed Series B Preferred Stock. During the three and nine months ended September 30, 2024, the Company recognized a deemed dividend of \$19,392 and \$271,086, respectively, related to cash premiums.

As of September 30, 2024 and December 31, 2023, the Company has accrued a liability for installment payments owed to investors in either cash or shares of \$0 and \$3,395,945, respectively. The Company paid approximately \$ 8.8 million to fully satisfy its obligations to the Series B preferred stockholders. Subsequent to September 30, 2024, and as of November 13, 2024, the Company has issued 0 shares of Common Stock in partial satisfaction of the accrued preferred redemption liability.

The Company effected the Reverse Stock Split on April 4, 2024. Pursuant to the terms of the Series B Certificate of Designations and the Series B Warrants, the Series B Conversion Price and the Series B Exercise Price were adjusted accordingly.

September 2024 Registered Direct Offering and Concurrent Private Placement

On September 10, 2024, the Company entered into a Securities Purchase Agreement (the "Series C Purchase Agreement") with certain accredited investors (the "Series C Investors"), pursuant to which it agreed to sell to the Series C Investors (i) in a registered direct offering, an aggregate of 1,793 shares of the Company's newly-designated Series C convertible preferred stock, par value \$0.0001, with a stated value of \$1,000 per share (the "Series C Preferred Stock"), initially convertible into up to 448,250 shares of Common Stock (the "Registered Conversion Shares") and (ii) in a concurrent private placement, an aggregate of 3,207 shares of the Series C Preferred Stock, initially convertible into up to 801,750 shares of Common Stock (the "Unregistered Conversion Shares" and, together with the Registered Conversion Shares, the "Series C Conversion Shares") as well as warrants (the "Series C Warrants") to acquire up to an aggregate of 1,250,000 shares of Common Stock (the "Series B Warrant Shares") (the registered direct offering and the concurrent private placement collectively, the "Series C Offering").

GP Nurmenkari Inc. acted as the placement agent for the Offering (the "Series C Placement Agent"). In connection with the Series C Offering, pursuant to an Engagement Letter between the Company and the Series C Placement Agent, the Company agreed to pay the Series C Placement Agent (i) a cash fee equal to 7.0% of the gross proceeds from any sale of securities in the Series C Offering and (ii) warrants to purchase shares of Common Stock equal to 3.0% of the number of shares of Common Stock that the Series C Preferred Stock are initially convertible into, with an exercise price of \$4.00 per share and a five-year term.

The terms of the Series C Preferred Stock are as set forth in the form of a Certificate of Designations (the "Series C Certificate of Designations"), which was filed with the Secretary of State for the State of Delaware on September 12, 2024. The Series C Preferred Stock is convertible into Series C Conversion Shares at the election of the holder at any time at an initial conversion price of \$4.00 per share (as adjusted from time to time pursuant to the terms of the Series C Certificate of Designations, the Series C Conversion Price). The Series C Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series C Conversion Price (subject to certain exceptions). The Company is

required to redeem the Series C Preferred Shares in equal quarterly installments, commencing on October 31, 2024. The amortization payments due upon such redemption are payable in cash at 107% of the applicable Installment Amount (as defined in the Series C Certificate of Designations).

The holders of the Series C Preferred Shares are entitled to dividends of 5% per annum, compounded quarterly, which will be payable in cash. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series C Certificate of Designations), the Series C Preferred Shares will accrue dividends at the rate of 15% per annum. The holders of Series C Preferred Shares are entitled to vote with holders of the Common Stock as a single class on all matters that holders of Common Stock are entitled to vote upon, with the number of votes per Series C Preferred Share equal to the stated value of such Series C Preferred Share divided by the "Minimum Price" (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) immediately prior to the date of the Series C Purchase Agreement.

Following the first anniversary of the initial issuance of the Series C Preferred Shares through the date that is ten calendar days thereafter, holders of Series C Preferred Shares may require the Company to redeem all or any portion of their Series C Preferred Shares in cash, pursuant to the terms set forth in the Series C Certificate of Designation.

Notwithstanding the foregoing, the Company's ability to settle conversions is subject to certain limitations set forth in the Certificate of Designations, including a limit on the number of shares that may be issued until the time, if any, that the Company receives Nasdaq Stockholder Approval. The Company has agreed to seek Nasdaq Stockholder Approval of these matters at a meeting to be held no later than December 31, 2024. Further, the Series C Certificate of Designations contains a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series C Certificate of Designations or Series C Warrants.

The Series C Certificate of Designations includes certain Triggering Events (as defined in the Series C Certificate of Designations), including, among other things, the failure to file and maintain an effective registration statement covering the sale of the holder's securities registrable pursuant to the Series C Registration Rights Agreement (defined below) and the Company's failure to pay any amounts due to the holders of the Series C Preferred Shares when due. In connection with a Triggering Event, each holder of Series C Preferred Shares will be able to require the Company to redeem in cash any or all of the holder's Series C Preferred Shares at a premium set forth in the Series C Certificate of Designations.

The Company is subject to certain affirmative and negative covenants regarding the incurrence of indebtedness, acquisition and investment transactions, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends (other than dividends pursuant to the Series C Certificate of Designations), distributions or redemptions, and the transfer of assets, among other matters.

The Series C Warrants are exercisable immediately at the Series C Exercise Price and expire five years from the date of issuance. The Series C Exercise Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series C Exercise Price (subject to certain exceptions). There is no established public trading market for the Series C Warrants and the Company does not intend to list the Series C Warrants on any national securities exchange or nationally recognized trading system.

In connection with the Series C Purchase Agreement, on September 10, 2024, the Company and the Series C Investors entered into a Registration Rights Agreement (the "Series C Registration Rights Agreement"), pursuant to which the Company was required to file a resale registration statement with the SEC to register for resale 200% of the Unregistered Conversion Shares and 200% of the Series C Warrant Shares. The Company filed a registration statement for the resale of such securities on October 10, 2024, which was declared effective by the SEC on October 21, 2024. The Company also agreed to other customary obligations regarding registration, including indemnification and maintenance of the effectiveness of the registration statement.

Accounting Treatment of Series B Offering

Series B Preferred Shares

Effective March 17, 2023, the Company filed the First CoD Amendment. The First CoD Amendment modified (i) the definition of Floor Price to mean the lower of (i) \$31.25 and (ii) 20% of the "Minimum Price" (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) on the date of receipt of Stockholder Approval (as defined in the Agreement), (ii) the definition of Installment Date to mean June 1, 2023, and thereafter, the first Trading Day of each calendar month immediately following the previous Installment Date until the Maturity Date, and the Maturity Date, and (iii) the definition of Maturity Date to mean August 31, 2024. In accordance with ASC 470-50 and 470-60, the Company has made an accounting policy election to account for amendments of the Series B Preferred Stock as modifications or extinguishments based on the change in fair value of the instrument immediately before and immediately after the amendment. The Company accounted for the First CoD Amendment as an extinguishment as the change in fair value of the Series B Preferred Stock was 34% (greater than ten percent (10%)) immediately before and immediately after. In accordance with ASC 260-10-S99-2, the Company recognized the \$5.7 million increase in fair value as a deemed dividend on the statement of operations.

On May 11, 2023, the Company filed the Second CoD Amendment. The Second CoD Amendment removed the definition of Make-Whole Amount (as was previously defined in the Agreement) and modified the definition of the Conversion Amount so as to remove the Make-Whole Amount from said definition. In accordance with ASC 470-50 and 470-60, the Company accounted for the amendment as a modification as the change in fair value of the Series B Preferred Stock was 0.05% (less than ten percent (10%)) immediately before and immediately after. The Company analogized to the share-based payments model for the appropriate modification accounting and did not recognize a deemed dividend as the fair value decreased upon modification.

The Series B Preferred Shares were determined to be more akin to a debt-like host than an equity-like host. The Company identified the following embedded features that are not clearly and closely related to the debt host instrument: 1) make-whole interest upon a contingent redemption event, 2) make-whole interest upon a conversion event, 3) an installment redemption upon an Equity Conditions Failure (as defined in the Certificate of Designations), and 4) variable share-settled installment conversion. These features were bundled together, assigned probabilities of being affected and measured at fair value. Subsequent changes in fair value of these features are recognized in the Consolidated Statement of Operations. The Company estimated the \$2.2 million fair value of the bifurcated embedded derivative at issuance using a Monte Carlo simulation model, with the following inputs: the fair value of the Common Stock of \$163.00 on the issuance date, estimated equity volatility of 85.0%, estimated traded volume volatility of 255.0%, the time to maturity of 1.61 years, a discounted market interest rate of 7.3%, dividend rate of 7%, a penalty dividend rate of 15.0%, and probability of default of 8.2%. The fair value of the bifurcated derivative liability was estimated utilizing the with and without method which uses the probability weighted difference between the scenarios with the derivative and the plain vanilla maturity scenario without a derivative.

The discount to the fair value is included as a reduction to the carrying value of the Series B Preferred Shares. During 2022, the Company recorded a total discount of approximately \$12.3 million upon issuance of the Series B Preferred Shares, which was comprised of the issuance date fair value of the associated embedded derivative of approximately \$2.2 million, stock issuance costs of approximately \$0.5 million and the fair value of the Warrants of approximately \$ 9.6 million. As such, the Company recognized \$ 0 and \$4,911,312, respectively, to additional paid-in capital to accrete the Series B Preferred Shares to redemption amount pursuant to ASC 480-10-S99-3A with a corresponding increase in the carrying value of the Series B Preferred Shares.

During the three months ended September 30, 2024 and 2023, the Company recorded a gain of \$ 0 and \$969,000, respectively, and, during the nine months ended September 30, 2024 and 2023, the Company recorded a gain of \$1,113,000 and a loss of \$1,289,600, respectively related to the change in fair value of the derivative liability corresponding to the Series B Preferred Shares which are recorded in other income (expense) on the statements of comprehensive loss. The Company recorded a fair value of \$0 of the bifurcated embedded derivative at September 30, 2024 based upon the expiration of the Series B Preferred Stock liability.

Series B Common Stock Warrants

Pursuant to the Private Placement, the Company issued to investors Warrants and, pursuant to its advisory agreements, the Company issued to its advisor additional Warrants with the same terms. The Broker Warrants are within the scope of ASC 718 pursuant to ASC 718-10-20 but are subject to liability classification as they would be required to be classified as liabilities in accordance with ASC 480.

The Warrants were determined to be within the scope of ASC 480-10 as they are puttable to the Company at Holders' election upon the occurrence of a Fundamental Transaction (as defined in the agreements). As such, the Company recorded the Warrants as a liability at fair value with subsequent changes in fair value recognized in earnings. The Company utilized the Black Scholes Model to calculate the value of these warrants issued during the year ended December 31, 2023. The fair value of the Warrants of approximately \$9.9 million was estimated at the date of issuance using the following weighted average assumptions: dividend yield 0%; expected term of five years; equity volatility of 105%; and a risk-free interest rate of 3.97%.

Transaction costs incurred attributable to the issuance of the Warrants of \$ 0.9 million were immediately expensed in accordance with ASC 480.

During the three months ended September 30, 2024 and 2023, the Company recorded a loss of \$ 33,000 and a gain of \$674,000, respectively and, during the nine months ended September 30, 2024 and 2023, the Company recorded a loss of \$ 129,000 and a gain of \$1,055,000, respectively related to the change in fair value of the warrant liability, which is recorded in other income (expense) on the statements of comprehensive loss. The fair value of the Warrants of approximately \$269,000 was estimated at September 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 3.14 years; equity volatility of 115%; and a risk-free interest rate of 3.58%.

The Series C Preferred Shares were determined to be more akin to a debt-like host than an equity-like host. The Company identified the following embedded features that are not clearly and closely related to the debt host instrument: 1) certain contingent redemption options and 2) variable share-settled installment conversions. These features were bundled together, assigned probabilities of being affected and measured at fair value. Subsequent changes in fair value of these features are recognized in the Consolidated Statement of Operations. The Company estimated the approximately \$6.1 million fair value of the bifurcated embedded derivative at issuance using a discounted cash flow scenario model, with the following inputs: the fair value of our common stock of \$2.85 on the issuance date, estimated equity volatility of 90.0%, the time to maturity of 1.57 years, the installment redemption premium of 107%, a market interest rate of 5.53%, a risk-free rate of 3.76%, and dividend rate of 5%. The fair value of the bifurcated derivative liability was estimated utilizing the with and without method which uses the probability weighted difference between the scenarios with the derivative and the plain vanilla maturity scenario without a derivative.

The discount to the fair value is included as a reduction to the carrying value of the Series C Preferred Shares. During 2024, the Company recorded a total discount of approximately \$5 million upon issuance of the Series C Preferred Shares as the fair value of the liabilities required to be remeasured at fair value exceeded the gross proceeds. The Company recognized the excess of the fair value of the total of these liabilities over the proceeds received as a loss upon issuance of preferred stock of \$3.8 million which is included in other income (expense) in the Condensed Consolidated Statement of Operations. Upon issuance it was deemed probable that the Series C Preferred Shares will be redeemed; the Company therefore recorded accretion expense of approximately \$0.3 million to adjust the Series C Preferred Shares to their redemption amount pursuant to ASC 480-10-S99-3A.

During the quarter ended September 30, 2024, the Company recorded a loss of \$ 22,000 related to the change in fair value of the derivative liability corresponding to the Series C Preferred Shares which is recorded in other income (expense) on the Statements of Operations. The Company estimated the approximately \$6.1 million fair value of the bifurcated embedded derivative as of September 30, 2024 using a discounted cash flow scenario model, with the following inputs: the fair value of our common stock of \$3.02 on the valuation date, estimated equity volatility of 90.0%, the time to maturity of 1.52 years, the installment redemption premium of 107%, a market interest rate of 5.30%, a risk-free rate of 3.74%, and dividend rate of 5%.

Series C Common Stock Warrants

Pursuant to the Private Placement, the Company issued to investors Series C Warrants to purchase 1,250,000 shares of Common Stock, with an exercise price of \$4.00 per share (subject to adjustment), for a period of five years from the date of issuance. Pursuant to its advisory agreements, the Company issued to its advisor additional Series C Warrants to purchase 37,500 shares of Common Stock with the same terms (the "Series C Broker Warrants"). The Series C Broker Warrants are within the scope of ASC 718 pursuant to ASC 718-10-20 but are subject to liability classification as they would be required to be classified as liabilities in accordance with ASC 480.

The Series C Warrants were determined to be within the scope of ASC 480-10 as they are puttable to the Company at Holders' election upon the occurrence of a Fundamental Transaction (as defined in the agreements). As such, the Company recorded the Series C Warrants as a liability at fair value with subsequent changes in fair value recognized in earnings. The Company utilized the Black Scholes Model to calculate the value of these warrants issued during the quarter ended September 30, 2024. The fair value of the Series

C Warrants of approximately \$2.8 million was estimated at the date of issuance using the following weighted average assumptions: dividend yield 0%; expected term of five years; equity volatility of 110%; and a risk-free interest rate of 3.41%.

Transaction costs incurred attributable to the issuance of the Warrants of \$ 0.6 million, which includes the issuance date fair value of the Series C Broker Warrants of approximately \$0.1 million, were immediately expensed in accordance with ASC 480.

During the quarter ended September 30, 2024, the Company recorded a loss of approximately \$ 0.2 million related to the change in fair value of the warrant liability which is recorded in other income (expense) on the Condensed Statements of Operations and Comprehensive Loss. The fair value of the Series C Warrants of approximately \$3.0 million was estimated at September 30, 2024 utilizing the Black Scholes Model using the following weighted average assumptions: dividend yield 0%; remaining term of 4.95 years; equity volatility of 110%; and a risk-free interest rate of 3.52%.

Reverse Stock Split

At the Company's annual meeting of stockholders held on December 20, 2023, the stockholders approved an amendment to the Company's amended and restated certificate of incorporation to effect one reverse stock split of the Company's outstanding shares of Common Stock, at any ratio between 1-for-8 and 1-for-25. On April 4, 2024, the Company effected the Reverse Stock Split. As a result of the Reverse Stock Split, every 25 shares of the Common Stock outstanding before the Reverse Stock Split was combined and reclassified into one share of Common Stock. These financial statements have been adjusted to retrospectively reflect the Reverse Stock Split.

Based upon the Reverse Stock Split and Series C offering, the total number of Series B Warrants held by the Series B Investors has been adjusted to 123,976 with an exercise price of \$2.8586 per share. In addition, the Series B Conversion Price was adjusted to \$2.8656 per Series B Preferred Share.

Note 7 – Stock Based Compensation:

2020 Equity Incentive Plan

Upon completion of the Spin-Off, the Company's 2020 Equity Incentive Plan (the "2020 Plan") became effective on December 7, 2020. On December 20, 2023, the Company held its annual meeting of stockholders at which time the Company's stockholders approved an amendment to the Company's 2020 Plan was amended to increase the total number of shares of Common Stock authorized for issuance from 55,000 to an aggregate of 175,000 shares.

The Compensation Committee of the Company's board of directors (the "Committee") administers the 2020 Plan and has full power to grant stock options and Common Stock, construe and interpret the 2020 Plan, establish rules and regulations and perform all other acts, including the delegation of administrative responsibilities, as it believes reasonable and proper. The Committee, in its absolute discretion, may award Common Stock to employees, consultants, and directors of the Company, and such other persons as the Committee may select, and permit holders of options to exercise such options prior to full vesting.

Stock and Option Grants

The following is a summary of stock option activity under the stock option plans for the nine months ended September 30, 2024:

	Number of Shares	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in millions)
Options outstanding at January 1, 2024	29,674	\$ 153.75	7.90	\$ —
Options granted	3,200	\$ 5.39	8.98	—
Less options forfeited	—	\$ —	—	—
Less options expired/cancelled	—	\$ —	—	—
Less options exercised	—	\$ —	—	—
Options outstanding at September 30, 2024	32,874	\$ 139.27	8.02	\$ —
Options exercisable at September 30, 2024	29,674	\$ 153.71	7.95	\$ —

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the closing price of the Common Stock, which was \$3.02 per share on September 30, 2024 and \$ 6.80 per share on December 31, 2023.

As of September 30, 2024, the Company had unrecognized stock option expense of \$ 7,828 and a remaining weighted average period for recognition of 0.52 years.

On April 8, 2024, Synaptogenix granted stock options to four Board members to purchase an aggregate of 3,200 shares of Common Stock. The stock options have an exercise price of \$5.39 per share and an expiration date of ten years. The options vest on the one-year anniversary from the date of the grant. The Company used the Black Scholes valuation method to determine the fair value of the options assuming the following: implied volatility of 124.35%, a risk-free interest rate of 4.43% and have an aggregate fair value of \$15,040, which is expensed over the vesting term.

Director's Compensation Policy

On March 29, 2023, Synaptogenix adopted an amended and restated non-employee director compensation policy (the "Director Compensation Policy"). The Director Compensation Policy provides for the annual automatic grant of nonqualified stock options to purchase up to 800 shares of Synaptogenix's Common Stock to each of Synaptogenix's non-employee directors. Such grants shall occur annually on the fifth business day after the filing of Synaptogenix's Annual Report on Form 10-K, if available under the Plan, and shall vest on the one-year anniversary from the date of grant, subject to the director's continued service on the Board of Directors on the vesting date. Each newly appointed or elected director will also receive 800 options, and such options shall vest 50% on the grant date, 25% on the first anniversary of the grant date and 25% on the second anniversary of the grant date, subject to the director's continued service on the Board of Directors on each vesting date. On April 8, 2024, the Company issued options to purchase a total of 3,200 shares of common stock at an exercise price of \$ 5.39 per share to four directors pursuant to the Director Compensation Policy.

The Company recorded total expenses relating to the outstanding stock options of \$ 3,791 and \$15,064 for the three months ended September 30, 2024 and 2023, respectively, and recorded total expenses relating to the outstanding stock options of \$21,618 and \$994,261 for the nine months ended September 30, 2024 and 2023, respectively.

Restricted Stock Issuances

On January 5, 2023, the Company issued 3,533 shares of restricted stock to a consultant that was engaged to provide investor relations services with a total fair market value on date of issuance of \$100,000 expensed upon issuance. On March 22, 2023, the Company issued 180 shares of restricted stock to a consultant that was engaged to provide investor relations services with a total fair market value on date of issuance of \$4,500, expensed upon issuance.

On January 8, 2024, the Company issued 14,641 shares of restricted stock to a consultant that was engaged to provide investor relations services with a total fair market value on date of issuance of \$100,000, expensed upon issuance. On March 7, 2024, the Company issued 981 shares of restricted stock to a consultant that was engaged to provide investor relations services with a total fair market value on date of issuance of \$4,500, expensed upon issuance.

On June 7, 2024, the Company issued 1,079 shares of restricted stock to a consultant that was engaged to provide investor relations services with a total fair market value on the date of issuance of \$4,500, expensed upon issuance.

On September 10, 2024, the Company issued 1,304 shares of restricted stock to a consultant that was engaged to provide investor relations services with a total fair market value on the date of issuance of \$4,500, expensed upon issuance.

Stock Compensation Expense

Total stock-based compensation for the three months ended September 30, 2024 and 2023 was \$ 3,791 and 15,064, respectively, of which all was classified as general and administrative expense. Total stock-based compensation for the nine months ended September 30, 2024 and 2023 was \$21,618 and \$994,261, respectively, of which \$ 0 and \$149,589, respectively, was classified as research and development expense, and \$21,618 and \$844,672, respectively, was classified as general and administrative expense.

The Company currently estimates, beginning at the closing date of the Series B Offering, implied volatility factor for all options and warrants based upon a blend of the Parent Company's and Company's historical volatility. Up until November 21, 2022, the Company computed implied volatility based upon a blend of the Parent Company's and Company's historical volatility along with the volatility of selected comparable publicly traded companies as, at that time, the Company lacked sufficient historical stock trading activity. It incorporated the historical volatility of the Parent Company as the Parent Company's historical volatility provides a good estimation of the Company's volatility since its operations were identical to the Company's prior to the spin-out.

Note 8 – Common Stock Warrants:

As of September 30, 2024, the Company had warrants outstanding consisting of the following:

	Number of shares
Warrants outstanding January 1, 2023	287,436
Warrants issued	1,331,431
Warrants exercised	—
Warrants expired	—
Warrants outstanding and exercisable September 30, 2024	<u>1,618,867</u>

As of September 30, 2024, the weighted average exercise price and the weighted average remaining life of the total warrants were \$46.51 per warrant and 4.36 years, respectively. The intrinsic value of the warrants as of September 30, 2024 was approximately \$34,000. The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the closing price of the Common Stock, which was \$3.02 per share on September 30, 2024.

Note 9 - 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 warrant liability and bifurcated embedded derivatives represent Level 3 measurements. The following

table presents information about the Company's 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:

Description	Level	September 30, 2024	December 31, 2023
Liabilities:			
Warrant liability (Note 6)	3	\$ 3,251,000	\$ 140,000
Bifurcated embedded derivative liability (Note 6)	3	\$ 6,118,000	\$ 1,113,000

The following table sets forth a summary of the change in the fair value of the warrant liability that is measured at fair value on a recurring basis:

	September 30, 2024
Balance on December 31, 2022	\$ 1,510,000
Change in fair value of warrant liability	(1,370,000)
Balance on December 31, 2023	\$ 140,000
Change in fair value of warrant liabilities Series B Preferred	129,000
Balance of warrant liabilities Series B Preferred	269,000
Warrant liabilities upon issuance of Series C Preferred	2,797,000
Change in fair value of warrant liabilities Series C Preferred	185,000
Balance on September 30, 2024	<u>\$ 3,251,000</u>

The following table sets forth a summary of the change in the fair value of the bifurcated embedded derivative liability that is measured at fair value on a recurring basis:

	September 30, 2024
Balance on December 31, 2022	\$ 369,400
Change in fair value of bifurcated embedded derivative	(743,600)
Balance on December 31, 2023	\$ 1,113,000
Change in fair value of derivative liability Series B Preferred	(1,113,000)
Balance of derivative liability Series B Preferred	—
Derivative liability upon issuance of Series C Preferred	6,096,000
Change in fair value of derivative liability Series C Preferred	22,000
Balance on September 30, 2024	<u>\$ 6,118,000</u>

Note 10 – Subsequent Events

Refer to Notes 6 and 7 for disclosure of applicable subsequent events.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes appearing elsewhere in this report. In addition to historical information, this discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our 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 titled "Risk Factors" included elsewhere in this report and our Annual Report on Form 10-K for the year ended December 31, 2023.

The following discussion highlights our results of operations and the principal factors that have affected our financial condition as well as our liquidity and capital resources for the periods described, and provides information that management believes is relevant for an assessment and understanding of the statements of financial condition and results of operations presented herein. The following discussion and analysis are based on the unaudited financial statements contained in this report, which we have prepared in accordance with United States generally accepted accounting principles. You should read the discussion and analysis together with such financial statements and the related notes thereto.

Basis of Presentation

The unaudited financial statements for the nine months ended September 30, 2024 and 2023 include a summary of our significant accounting policies and should be read in conjunction with the discussion below and our financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q. In the opinion of management, all material adjustments necessary to present fairly the results of operations for such periods have been included in the financial statements. All such adjustments are of a normal recurring nature.

Overview

We are a biopharmaceutical company with product candidates in pre-clinical and clinical development. We began operations in October 2012. We are principally focused on developing a product platform based upon a drug candidate called Bryostatin-1 for the treatment of Alzheimer's disease, which is in the clinical testing stage. We are also evaluating Bryostatin-1 for other neurodegenerative or cognitive diseases and dysfunctions, such as Fragile X syndrome, Multiple Sclerosis, and Niemann-Pick Type C disease, which have undergone pre-clinical testing.

Neurotrope, our predecessor company, had been a party to a technology license and services agreement with the original Blanchette Rockefeller Neurosciences Institute (which has been known as Cognitive Research Enterprises, Inc. since October 2016), and its affiliate NRV II, LLC, which we collectively refer to herein as "CRE," pursuant to which we now have an exclusive non-transferable license to certain patents and technologies required to develop our proposed products. We were formed for the primary purpose of commercializing the technologies initially developed by BRNI for therapeutic applications for AD or other cognitive dysfunctions. These technologies have been under development by BRNI since 1999 and, until March 2013, had been financed through funding from a variety of non-investor sources (which include not-for-profit foundations, the NIH, which is part of the U.S. Department of Health and Human Services, and individual philanthropists). From March 2013 forward, development of the licensed technology has been funded principally through us in collaboration with CRE.

November 2022 Private Placement

On November 17, 2022, we entered into the Series B Purchase Agreement with the Series B Investors, pursuant to which we agreed to sell to the Series B Investors (i) an aggregate of 15,000 shares of Series B Preferred Stock and (ii) Series B Warrants to acquire up to an aggregate of 77,419 shares of Common Stock. We received total gross proceeds of approximately \$15 million from the Series B Offering.

The Series B Preferred Stock matured on September 9, 2024, and no shares of Series B Preferred Stock remain outstanding. The terms of the Series B Preferred Stock were as set forth in the Series B Certificate of Designations. The Series B Preferred Stock was convertible into Series B Preferred Shares at the election of the holder at any time at the Series B Conversion Price. The Series B Conversion Price was subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Conversion Price (subject to certain exceptions). We were required to redeem the Series B Preferred Stock in 15 equal monthly installments, commencing on June 1, 2023. The amortization payments due upon such redemption were payable, at our election, in cash, or subject to certain limitations, in shares of Common Stock valued at the lower of (i) the Series B Conversion Price then in effect and (ii) the greater of (A) a 15% discount to the average of the three lowest closing prices of the Common Stock during the thirty trading day period immediately prior to the date the amortization payment is due or (B) the lower of \$31.25 and \$4.30, which equals 20% of the Minimum Price (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) on April 14, 2023, the date of receipt of Nasdaq Stockholder Approval; provided that if the amount set forth in clause B is the lowest effective price, we will be required to pay the amortization payment in cash. We had the ability to require holders to convert their Series B Preferred Stock into Series B Preferred Shares if the closing price of the Common Stock exceeded \$290.625 per share for 20 consecutive trading days and the daily trading volume of the Common Stock exceeded 4,000 shares per day during the same period and certain equity conditions described in the Series B Certificate of Designations were satisfied.

On March 17, 2023, the Company filed an amendment (the "First CoD Amendment") to the Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which it amended the terms of the Series B Preferred Stock by revising the definition of "floor price" for purposes of calculating amortization payments, extending the date for the first required amortization payments, extending the deadline for stockholder approval and extending the maturity date to August 31, 2024. On May 12, 2023, the Company filed an amendment (the "Second CoD Amendment") to the Series B Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which the Company amended the terms of the Series B Preferred Stock by removing all references to the "Make-Whole Amount". In connection with the Second CoD Amendment, on May 11, 2023, the Company entered into an amendment to the Series B Purchase Agreement pursuant to which it agreed to extend the investors' right of participation in a subsequent financing until the one year anniversary following the later of (x) such time that no shares of Series B Preferred Stock are outstanding and (y) the maturity date of the Series B Preferred Stock. On September 22, 2023, the Company filed an amendment (the "Third CoD Amendment") to the Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which the Company amended the terms of the Series B Preferred Stock by providing that the Company and Series B Investors shall be permitted to mutually agree, in connection with any waiver of an Equity Conditions Failure (as defined in the Series B Certificate of Designations), as to (i) whether the monthly amortization payments made to the Series B Investors will be made in cash or shares of Common Stock, (ii) the methodology for calculating any applicable true-up shares required to be paid in connection with an amortization payment (including whether such true-up shares will be paid in cash or shares of Common Stock) and for calculating the conversion price in connection with any accelerated conversions, and (iii) whether any premium will apply in connection with any payment of true-up shares in cash instead of shares of Common Stock, subject to certain limitations as set forth in the Third CoD Amendment. On September 3, 2024, the Company filed an amendment to the Series B Certificate of Designations with the Secretary of State for the State of Delaware, pursuant to which the Company extended the maturity date to September 9, 2024, subject to further extension pursuant to the terms of the Certificate of Designations.

The holders of the Series B Preferred Stock were entitled to dividends of 7% per annum, compounded monthly, which were payable in cash or shares of Common Stock at our option, in accordance with the terms of the Certificate of Designations. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series B Certificate of Designations), the Series B Preferred Stock would have accrued dividends at the rate of 15% per annum. The holders of Series B Preferred Stock had no voting rights on account of the Series B Preferred Stock, other than with respect to certain matters affecting the rights of the Series B Preferred Stock.

Notwithstanding the foregoing, the Company's ability to settle conversions and make amortization payments using shares of Common Stock was subject to certain limitations set forth in the Series B Certificate of Designations, including a limit on the number of shares that may be issued until the Nasdaq Stockholder Approval. The Company received Nasdaq Stockholder Approval at the Company's special meeting of stockholders held on April 14, 2023. Further, the Series B Certificate of Designations contained a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of, or as part of any amortization payment under, the Series B Certificate of Designations or Series B Warrants.

Further, the Series B Certificate of Designations contained a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of, or as part of any amortization payment under, the Series B Certificate of Designations or Series B Warrants.

The Series B Certificate of Designations included certain Triggering Events (as defined in the Series B Certificate of Designations), including, among other things, the failure to file and maintain an effective registration statement covering the sale of the holder's securities registrable pursuant to the Series B Registration Rights Agreement (defined below) and our failure to pay any amounts due to the holders of the Series B Preferred Stock when due. In connection with a Triggering Event, each holder of Series B Preferred Stock will be able to require us to redeem in cash any or all of the holder's Series B Preferred Stock at a premium set forth in the Series B Certificate of Designations.

We are subject to certain affirmative and negative covenants regarding the incurrence of indebtedness, acquisition and investment transactions, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends (other than dividends pursuant to the Series B Certificate of Designations), distributions or redemptions, and the transfer of assets, among other matters.

The Series B Warrants are exercisable for Series B Warrant Shares at an initial exercise price of \$2.8586 per share (as adjusted from time to time pursuant to the terms of the Series B Warrants, the "Series B Exercise Price") and expire five years from the date of issuance. The Series B Exercise Price was reduced based upon the Reverse Stock Split and the Series C Private Placement (see below). The Series B Exercise Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment, on a "full ratchet" basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series B Exercise Price (subject to certain exceptions). There is no established public trading market for the Series B Warrants and the Company does not intend to list the Series B Warrants on any national securities exchange or nationally recognized trading system.

In connection with the Series B Purchase Agreement, we and the Series B Investors entered into a Registration Rights Agreement (the "Series B Registration Rights Agreement") on November 17, 2022. Under the terms of the Series B Registration Rights Agreement, we agreed to register 200% of the Series B Preferred Shares, the Series B Warrant Shares and the shares of Common Stock issuable as amortization payments as well as any shares of Common Stock paid as dividends. We filed a registration statement for the resale of such securities on December 16, 2022. We also agreed to other customary obligations regarding registration, including indemnification and maintenance of the effectiveness of the registration statement.

In connection with the Series B Offering, pursuant to an Engagement Letter, between the Company and Catalyst Securities LLC (the "Series B Placement Agent"), we paid the Series B Placement Agent (i) a cash fee equal to 7% of the gross proceeds from any sale of securities in the Series B Offering and (ii) warrants to purchase shares of Common Stock equal to 3% of the number of shares of Common Stock that the Series B Preferred Shares are initially convertible into, with an exercise price of \$2.8586 per share, pursuant to the above, and a five-year term.

During the three and nine months ended September 30, 2024, the Company redeemed \$0 and \$6,000,000, respectively, of the Series B Preferred Stock and \$274,140 and \$396,640, respectively of accrued dividends by issuing 100,000 and 374,219 shares, respectively, of Common Stock through installment conversions and proportionately relieved \$0 and \$4,911,312 of discount, respectively, related to the redeemed Series B Preferred Stock. During the three and nine months ended September 30, 2024, the Company recognized a deemed dividend of \$19,392 and \$271,086, respectively, related to cash premiums.

As of September 30, 2024 and December 31, 2023, the Company has accrued a liability for installment payments owed to investors in either cash or shares of \$0 and \$3,395,945, respectively. The Company paid approximately \$8.8 million to fully satisfy its obligations to the Series B preferred stockholders. Subsequent to September 30, 2024, and as of November 12, 2024, the Company has issued 0 shares of Common Stock in partial satisfaction of the accrued preferred redemption liability.

The Company effected the Reverse Stock Split on April 4, 2024. Pursuant to the terms of the Series B Certificate of Designations and the Series B Warrants, the Series B Conversion Price and the Series B Exercise Price were adjusted accordingly.

September 2024 Private Placement

On September 10, 2024, we entered into the Series C Purchase Agreement with the Series C Investors, pursuant to which we agreed to sell to the Series C Investors (i) in a registered direct offering, an aggregate of 1,793 shares of Series C Preferred Stock, initially convertible into up to 448,250 Registered Conversion Shares and (ii) in a concurrent private placement, an aggregate of 3,207 shares of Series C Preferred Stock, initially convertible into up to 801,750 Unregistered Conversion Shares as well as Series C Warrants to acquire up to an aggregate of 1,250,000 Series B Warrant Shares.

GP Nurmenkari Inc. acted as the Series C Placement Agent. In connection with the Series C Offering, pursuant to an Engagement Letter between the Company and the Series C Placement Agent, we agreed to pay the Series C Placement Agent (i) a cash fee equal to 7.0% of the gross proceeds from any sale of securities in the Series C Offering and (ii) warrants to purchase shares of Common Stock equal to 3.0% of the number of shares of Common Stock that the Series C Preferred Stock are initially convertible into, with an exercise price of \$4.00 per share and a five-year term.

The terms of the Series C Preferred Stock are as set forth in the Series C Certificate of Designations, which was filed with the Secretary of State for the State of Delaware on September 12, 2024. The Series C Preferred Stock is convertible into Series C Conversion Shares at the election of the holder at any time at the Series C Conversion Price. The Series C Conversion Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like, and subject to price-based adjustment in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series C Conversion Price (subject to certain exceptions). We are required to redeem the Series C Preferred Shares in equal quarterly installments, commencing on October 31, 2024. The amortization payments due upon such redemption are payable in cash at 107% of the applicable Installment Amount (as defined in the Series C Certificate of Designations).

The holders of the Series C Preferred Shares are entitled to dividends of 5% per annum, compounded quarterly, which will be payable in cash. Upon the occurrence and during the continuance of a Triggering Event (as defined in the Series C Certificate of Designations), the Series C Preferred Shares will accrue dividends at the rate of 15% per annum. The holders of Series C Preferred Shares are entitled to vote with holders of the Common Stock as a single class on all matters that holders of Common Stock are entitled to vote upon, with the number of votes per Series C Preferred Share equal to the stated value of such Series C Preferred Share divided by the "Minimum Price" (as defined in Rule 5635 of the Rule of the Nasdaq Stock Market) immediately prior to the date of the Series C Purchase Agreement.

Following the first anniversary of the initial issuance of the Series C Preferred Shares through the date that is ten calendar days thereafter, holders of Series C Preferred Shares may require the Company to redeem all or any portion of their Series C Preferred Shares in cash, pursuant to the terms set forth in the Series C Certificate of Designation.

Notwithstanding the foregoing, our ability to settle conversions is subject to certain limitations set forth in the Certificate of Designations, including a limit on the number of shares that may be issued until the time, if any, that we receives Nasdaq Stockholder Approval. We have agreed to seek Nasdaq Stockholder Approval of these matters at a meeting to be held no later than December 31, 2024. Further, the Series C Certificate of Designations contains a certain beneficial ownership limitation after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Series C Certificate of Designations or Series C Warrants.

The Series C Certificate of Designations includes certain Triggering Events (as defined in the Series C Certificate of Designations), including, among other things, the failure to file and maintain an effective registration statement covering the sale of the holder's securities registrable pursuant to the Series C Registration Rights Agreement (defined below) and our failure to pay any amounts due to the holders of the Series C Preferred Shares when due. In connection with a Triggering Event, each holder of Series C Preferred Shares will be able to require us to redeem in cash any or all of the holder's Series C Preferred Shares at a premium set forth in the Series C Certificate of Designations.

We are subject to certain affirmative and negative covenants regarding the incurrence of indebtedness, acquisition and investment transactions, the existence of liens, the repayment of indebtedness, the payment of cash in respect of dividends (other than dividends pursuant to the Series C Certificate of Designations), distributions or redemptions, and the transfer of assets, among other matters.

The Series C Warrants are exercisable immediately at the Series C Exercise Price and expire five years from the date of issuance. The Series C Exercise Price is subject to customary adjustments for stock dividends, stock splits, reclassifications and the like,

and subject to price-based adjustment, on a “full ratchet” basis, in the event of any issuances of Common Stock, or securities convertible, exercisable or exchangeable for Common Stock, at a price below the then-applicable Series C Exercise Price (subject to certain exceptions). There is no established public trading market for the Series C Warrants and we do not intend to list the Series C Warrants on any national securities exchange or nationally recognized trading system.

In connection with the Series C Purchase Agreement, on September 10, 2024, we and the Series C Investors entered into a Registration Rights Agreement, pursuant to which we were required to file a resale registration statement with the SEC to register for resale 200% of the Unregistered Conversion Shares and 200% of the Series C Warrant Shares. We filed a registration statement for the resale of such securities on October 10, 2024, which was declared effective by the SEC on October 21, 2024. We also agreed to other customary obligations regarding registration, including indemnification and maintenance of the effectiveness of the registration statement.

Results of Most Recent Extended Confirmatory Phase 2 Clinical Trial

On July 23, 2020, we entered into the 2020 Services Agreement with WCT. The 2020 Services Agreement relates to services for our Phase 2 clinical study assessing the safety, tolerability and long-term efficacy of Bryostatin-1 in the treatment of moderately severe AD subjects not receiving memantine treatment. On January 22, 2022, we executed a change order with WCT to accelerate trial subject recruitment totaling approximately \$1.4 million. The updated total estimated budget for the services, including pass-through costs, is approximately \$11.0 million. As previously disclosed, on January 22, 2020, we were granted a \$2.7 million award from the NIH, which award is being used to support the 2020 Study, resulting in a current estimated net budgeted cost of the 2020 Study to us of \$8.3 million. Of the \$2.7 million grant, virtually all has been received as of February 22, 2022. The 2020 Study was completed in December 2023.

On December 16, 2022, we issued a press release announcing that an extended confirmatory Phase 2 study of Bryostatin-1 in moderate to severe AD (Study #204) did not achieve statistical significance on the primary endpoint, which was change from baseline to Week 13 in the SIB total score assessment obtained after completion of the second seven-dose course of treatment (week 28 of trial). On March 7, 2023, we announced results of our analysis of secondary endpoints and post hoc analysis from our Phase 2 study of Bryostatin-1. In the secondary endpoint analysis, changes from baseline at Weeks 9, 20, 24, 30, and 42 in the SIB (Severe Impairment Battery) total score were not statistically significant in the total patient population, and no pre-specified secondary endpoints were met with statistical significance in the low-to-moderately severe AD patient stratum. However, nearly all pre-specified secondary endpoints in the most advanced and severe AD (MMSE: 10-14) patient population, with baseline MMSE-2 (Mini-Mental State Examination, 2nd Edition) scores of 10-14, were achieved with statistical significance ($p < 0.05$, 2-tailed). Data also showed statistical significance in exploratory secondary endpoints for the MMSE-2 10-14 stratum, and post hoc analysis was positive.

Open Label Dose Ranging Clinical Trial

On May 12, 2022, we entered into a services agreement with WCT (the “2022 Services Agreement”). The 2022 Services Agreement relates to services for a Phase 2 “open label,” dose ranging study, clinical trial assessing the safety, tolerability and efficacy of Bryostatin-1 administered via infusion in the treatment of moderately severe to severe AD subjects not receiving memantine treatment (the “2022 Study”).

Pursuant to the terms of the 2022 Services Agreement, WCT provided services to enroll approximately 12 2022 Study subjects. The first 2022 Study site was initiated during the third quarter of 2022. As of September 30, 2024, we incurred approximately \$1.6 million of cumulative expenses associated with the 2022 Study. We terminated the 2022 Services Agreement in December 2022. Of the total \$1.6 million incurred for the trial as of September 30, 2024, \$0 and approximately \$14,000 is reflected in the statement of comprehensive loss for the three months ended September 30, 2024 and 2023, respectively and \$0 and approximately \$131,000 is reflected in the statement of comprehensive loss for the nine months ended September 30, 2024 and 2023, respectively.

Other Development Projects

To the extent resources permit, we may pursue development of selected technology platforms with indications related to the treatment of various disorders, including neurodegenerative disorders such as AD, based on our currently licensed technology and/or technologies available from third party licensors or collaborators.

Nemours Agreement

On September 5, 2018, we announced a collaboration with Nemours, a premier U.S. children's hospital, to initiate a clinical trial in children with Fragile X. In addition to the primary objective of safety and tolerability, measurements will be made of working memory, language and other functional aspects such as anxiety, repetitive behavior, executive functioning, and social behavior. On August 5, 2021, we announced our memorandum of understanding with Nemours A.I. DuPont Hospital ("Nemours") to initiate a clinical trial using Bryostatin-1, under Orphan Drug Status, to treat Fragile X. We intend to provide the Bryostatin-1 drug product candidate and obtain the IND and Nemours intends to provide the clinical site and attendant support for the trial. We and Nemours, jointly, will develop the trial protocol. We currently estimate our total trial and IND cost to be approximately \$2 million. As of September 30, 2024, we have incurred cumulative expenses associated with this agreement of approximately \$100,000.

We have filed for an IND with the FDA. The FDA has placed the development of the IND on clinical hold pending completion of further analytics relating to drug pharmacokinetics and pharmacodynamics. We are currently evaluating our plans to advance Fragile X development.

Cleveland Clinic

On February 23, 2022, we announced our collaboration with Cleveland Clinic to pursue possible treatments for MS, and on July 19, 2023, we announced that we had entered into an agreement with Cleveland Clinic to conduct a Phase 1 trial of Bryostatin-1 in MS. Cleveland Clinic will manage the clinical trial's implementation, including an IND submission to the FDA and patient enrollment. Cleveland Clinic has enrolled three subjects and has dosed two to - date, with the total planned enrollment in the MS Trial of 20 subjects. The total estimated costs associated with this collaboration are approximately \$2.0 million. As of September 30, 2024, we have incurred expenses due to Cleveland Clinic approximately \$590,000 of which \$0 was expensed during the three months ended September 30, 2024.

LSU Health

Effective June 20, 2024, the Company signed a collaboration agreement with LSU Health to pursue pre-clinical testing of the Company's polyunsaturated fatty acid ("PUFA") analogs as a treatment for spinal cord injury ("SCI"). The Company also announced that the US Patent and Trademark Office (USPTO) recently issued US Patent No. 12,016,837 titled '*Halogenated Esters of Cyclopropanated Unsaturated Fatty Acids for Use in the Treatment of Neurodegenerative Diseases*,' covering its family of analogs. Synaptogenix holds exclusive rights to its PUFA analogs pursuant to a licensing agreement with CRE, formerly known as the Blanchette Rockefeller Neurosciences Institute. The studies will compare the analogs with Bryostatin in SCI. The total estimated costs associated with this collaboration are approximately \$200,000. As of September 30, 2024, the Company has paid amounts owed to LSU Health and its affiliates of \$50,000 of which \$0 was expensed during the three months ended September 30, 2024.

Results of Operations

Comparison of the three months ended September 30, 2024 and 2023

The following table summarizes our results of operations for the three months ended September 30, 2024 and 2023:

	Three Months ended September 30,		Dollar Change	% Change
	2024	2023		
Operating Expenses:				
Research and development expenses	\$ 222,897	\$ 212,103	\$ 10,794	5.1 %
General and administrative expenses	\$ 1,136,772	\$ 1,217,689	\$ (80,917)	(6.6)%
Other income (loss), net	\$ (4,382,344)	\$ 2,192,995	\$ (6,575,339)	(299.8)%
Net loss (income)	\$ 5,742,013	\$ (763,203)	\$ (6,505,216)	(852.4)%

Operating Expenses

Overview

Total operating expenses for the three months ended September 30, 2024 were \$1,359,669 as compared to \$1,429,792 for the three months ended September 30, 2023, a decrease of approximately 4.9%. The decrease in total operating expenses is due to the decrease in general and administrative expenses partially offset by an increase in research and development expenses.

Research and Development Expenses

For the three months ended September 30, 2024, we incurred \$222,897 in research and development expenses as compared to \$212,103 for the three months ended September 30, 2023, an increase of approximately 5.1%. These expenses were incurred primarily in connection with developing the potential AD therapeutic product and the initiation of the MS trial with Cleveland Clinic. Of these expenses, for the three months ended September 30, 2024, \$31,630 was incurred principally relating to our current MS clinical trial and our storage of drug product, \$173,797 for clinical consulting services, \$7,534 of amortization of prepaid licensing fees relating to the Stanford License Agreement and Mount Sinai Agreement, \$9,936 for development of alternative drug supply with Stanford University; comparatively, for the three months ended September 30, 2023, \$95,248 was incurred principally relating to our confirmatory clinical trial and related storage of drug product, \$96,883 for clinical consulting services, \$5,041 of amortization of prepaid licensing fees relating to the Stanford License Agreement and Mount Sinai Agreement, and \$14,931 for development of alternative drug supply with Stanford University.

Our research and development expenses have increased slightly as we initiated our MS clinical trial while our current Phase 2 clinical trial for AD was concluded by the end of 2023 and our Phase 2 dose ranging study was discontinued. Other development expenses might increase, as our resources permit, in order to advance our potential products. We are continuing to determine how to proceed with respect to our other current development programs for Bryostatin-1.

General and Administrative Expenses

We incurred \$1,136,772 and \$1,217,689 of general and administrative expenses for the three months ended September 30, 2024 and 2023, respectively, a decrease of approximately 6.6%. During the three months ended September 30, 2024, \$315,830 was incurred primarily for wages, bonuses, vacation pay, severance, taxes and insurance, versus \$300,598 for the three months ended September 30, 2023; \$113,173 was incurred for legal expenses versus \$180,566 for the 2023 comparable period. The higher legal fees for 2023 is based upon the prior year's increased fees for special stockholder vote requirements and for regulatory compliance; \$258,990 was incurred for outside operations consulting services during the three months ended September 30, 2024, versus \$247,344 for the comparable period in 2023; \$26,226 was incurred for travel expenses during the three months ended September 30, 2024, versus \$48,148 for the comparable period in 2023 as Company officers and directors conducted overseas due diligence for strategic investments; \$95,314 was incurred for investor relations services during the three months ended September 30, 2024, versus \$62,643 for the comparable period in 2023; \$58,995 was incurred for professional fees associated with auditing, financial, accounting and tax advisory services during the three months ended September 30, 2024, versus \$59,812 for the comparable period in 2023; \$161,467 was incurred for insurance during the three months ended September 30, 2024, versus \$190,786 for the comparable period in 2023. The decrease is attributable to lower premiums; \$102,986 was incurred for utilities, supplies, license fees, filing costs, rent, advertising and other during the three months ended September 30, 2024, versus \$112,728 for the comparable period in 2023; and \$3,791 was recorded as non-cash stock options compensation expense during the three months ended September 30, 2024, versus \$15,064 for the comparable period in 2023, as options granted during the 2023 period partially vested upon issuance.

Other Income / Expense

We recognized total other loss of \$4,382,344 for the three months ended September 30, 2024 as compared to total other income of \$2,192,995 for the three months ended September 30, 2023, which consisted, for 2024 and 2023, of interest income on funds deposited in interest bearing money market accounts and investments in short-term US treasury bills and changes in fair value of warrant and derivative liabilities and offering costs. The decrease in interest income and unrealized gains on treasury bills totaling \$249,314 for the three months ended September 30, 2024 is primarily attributable to the decrease in cash balances over the period and lower interest rates. The total increased loss is primarily attributable to the increase in change in fair value of derivative liability of \$892,000 and the increase in fair value of warrant liability of \$991,000, loss on issuance of Series C Preferred Stock of approximately \$3.8 million, warrant issuance costs of \$618,375 and share of loss in equity investment of \$12,025.

Net loss

We recognized losses of \$5,742,013 and income of \$763,203 for the three months ended September 30, 2024 and 2023, respectively. The increased loss was primarily attributable to the increase in research and development expenses and the increase in other loss partially offset by a decrease in general and administrative expenses.

Comparison of the nine months ended September 30, 2024 and 2023

The following table summarizes our results of operations for the nine months ended September 30, 2024 and 2023:

	Nine Months ended September 30,		Dollar Change	% Change
	2024	2023		
Operating Expenses:				
Research and development expenses	\$ 1,174,214	\$ 1,397,031	\$ (222,817)	(15.9)%
General and administrative expenses	\$ 3,457,916	\$ 4,784,415	\$ (1,326,499)	(27.7)%
Other income (loss), net	\$ (2,589,891)	\$ 1,138,911	\$ (3,728,802)	(327.4)%
Net loss	\$ 7,222,021	\$ 5,042,535	\$ 2,179,486	43.2 %

Operating Expenses

Overview

Total operating expenses for the nine months ended September 30, 2024 were \$4,632,130 as compared to \$6,181,446 for the nine months ended September 30, 2023, a decrease of approximately 25.1%. The decrease in total operating expenses is due to the decrease in research and development and general and administrative expenses.

Research and Development Expenses

For the nine months ended September 30, 2024, we incurred \$1,174,214 in research and development expenses as compared to \$1,397,031 for the nine months ended September 30, 2023, a decrease of approximately 15.9%. These expenses were incurred primarily in connection with developing the potential AD therapeutic product and the initiation of the MS trial with Cleveland Clinic. Of these expenses, for the nine months ended September 30, 2024, \$697,899 was incurred principally relating to our current MS clinical trial and our storage of drug product, \$426,523 for clinical consulting services, \$22,107 of amortization of prepaid licensing fees relating to the Stanford License Agreement and Mount Sinai Agreement, \$27,685 for development of alternative drug supply with Stanford University; comparatively, for the nine months ended September 30, 2023, \$938,003 was incurred principally relating to our confirmatory clinical trial and related storage of drug product, \$252,752 for clinical consulting services, \$15,288 of amortization of prepaid licensing fees relating to the Stanford License Agreement and Mount Sinai Agreement, \$41,399 for development of alternative drug supply with Stanford University and \$149,589 of non-cash stock options compensation expense.

Our research and development expenses have decreased as our current Phase 2 clinical trial for AD was concluded by the end of 2023 and our Phase 2 dose ranging study was discontinued while we initiated our MS clinical trial. Other development expenses might increase, as our resources permit, in order to advance our potential products. We are continuing to determine how to proceed with respect to our other current development programs for Bryostatins-1.

General and Administrative Expenses

We incurred \$3,457,916 and \$4,784,415 of general and administrative expenses for the nine months ended September 30, 2024 and 2023, respectively, a decrease of approximately 27.7%. During the nine months ended September 30, 2024, \$986,382 was incurred primarily for wages, bonuses, vacation pay, severance, taxes and insurance, versus \$948,689 for the nine months ended September 30, 2023; \$397,123 was incurred for legal expenses versus \$673,882 for the 2023 comparable period. The higher legal fees for 2023 is based upon the prior year's increased fees for special stockholder vote requirements and for regulatory compliance; \$751,761 was incurred for outside operations consulting services during the nine months ended September 30, 2024, versus \$720,159 for the comparable period in 2023; \$83,412 was incurred for travel expenses during the nine months ended September 30, 2024, versus \$122,196 for the comparable period in 2023 as Company officers and directors conducted overseas due diligence for strategic investments; \$316,249 was incurred for investor relations services during the nine months ended September 30, 2024, versus \$303,271 for the comparable period in 2023; \$214,192 was incurred for professional fees associated with auditing, financial, accounting and tax advisory services during the nine months ended September 30, 2024, versus \$245,021 for the comparable period in 2023; \$470,695 was incurred for insurance during the nine months ended September 30, 2024, versus \$577,950 for the comparable period in 2023. The decrease is attributable to lower premiums; \$216,433 was incurred for utilities, supplies, license fees, filing costs, rent, advertising and other during the nine months ended September 30, 2024, versus \$348,575 for the comparable period in 2023. The decrease is attributable to credits for franchise taxes paid during the 2023 period credited to 2024; and \$21,618 was recorded as non-cash stock options compensation expense during the nine months ended September 30, 2024, versus \$844,672 for the comparable period in 2023, as options granted during the 2023 period partially vested upon issuance.

Other Income / Expense

We recognized total other loss of \$2,589,891 for the nine months ended September 30, 2024 as compared to total other income of \$1,138,911 for the nine months ended September 30, 2023, which consisted, for 2024 and 2023, of interest income on funds deposited in interest bearing money market accounts and investments in short-term US treasury bills and changes in fair value of warrant and derivative liabilities and offering costs. The decrease in interest income and unrealized gains on treasury bills totaling \$278,927 for the nine months ended September 30, 2024 is primarily attributable to the decrease in cash balances over the period and lower interest rates. The total decreased income is primarily attributable to the increase in change in fair value of warrant liability of \$314,000, loss on issuance of Series C Preferred Stock of approximately \$3.8 million, warrant issuance costs of \$618,375 and share of loss in equity investment of \$30,475 partially offset by the change in fair value of derivative liability of 1,091,000.

Net loss

We recognized losses of \$7,222,021 and \$5,042,535 for the nine months ended September 30, 2024 and 2023, respectively. The increased loss was primarily attributable to the increase in other loss partially offset by the decrease in research and development and general and administrative expenses.

Financial Condition, Liquidity and Capital Resources

Cash and Working Capital

Since inception, we have incurred negative cash flows from operations. As of September 30, 2024, we had working capital of \$21,939,418 as compared to working capital of \$26,256,291 as of December 31, 2023. The \$4,316,873 decrease in working capital was primarily attributable to approximately \$4.6 million of operating expenses and redemptions of Series B preferred stock of approximately \$8.8 million, partially offset by the decrease in preferred stock liabilities of approximately \$3.4 million, net proceeds from Series C preferred stock offering of approximately \$4.5 million, non-cash expenses of approximately \$0.1 million and interest income of approximately \$1.1 million.

We expect that our current cash and cash equivalents of approximately \$18.3 million will be sufficient to support our projected operating requirements for at least the next 12 months from the date of this Quarterly Report on Form 10-Q, which would include the continuing development of Bryostatins-1, our novel drug candidate targeting the activation of PKC ϵ , our initiation and possible development of a therapeutic for MS and other possible therapeutics.

We expect to require additional capital in order to initiate, pursue and complete all potential AD clinical trials and obtain regulatory approval of one or more therapeutic candidates. However, additional future funding may not be available to us on acceptable terms, or at all. If we are unable to access additional funds when needed, we may not be able to initiate, pursue and complete all planned clinical trials or continue the development of our product candidates or we could be required to delay, scale back or eliminate some or all of our development programs and operations. Any additional equity financing, if available, may not be available on favorable terms, would most likely be significantly dilutive to our current stockholders and debt financing, if available, and may involve restrictive covenants. If we are able to access funds through collaborative or licensing arrangements, we may be required to relinquish rights to some of our technologies or product candidates that we would otherwise seek to develop or commercialize on our own, on terms that are not favorable to us. Our ability to access capital when needed is not assured and, if not achieved on a timely basis, would likely materially harm our business and financial condition.

Sources and Uses of Liquidity

We expect to continue to incur expenses, resulting in losses and negative cash flows from operations, over at least the next several years as we continue to develop AD and other therapeutic products. We anticipate that this development may include clinical trials in addition to our current ongoing clinical trial and additional research and development expenditures.

	Nine Months Ended September 30,	
	2024	2023
Cash used in operating activities	\$ 3,716,123	\$ 4,107,209
Cash used in investing activities	1,000,000	2,707
Cash used in (provided by) financing activities	4,319,595	1,641,015

Net Cash Used in Operating Activities

Cash used in operating activities was \$3,716,123 for the nine months ended September 30, 2024, compared to \$4,107,209 for the nine months ended September 30, 2023. The \$391,086 decrease primarily resulted from the and increase in accounts payable and accrued expenses of approximately \$0.4 million and the increase in offering costs of approximately \$4.6 million, partially offset by the increased net loss of approximately \$2.2 million, increase in prepaid expenses of approximately \$0.2 million, the changes in fair value of non-cash warrant and derivative liabilities totaling approximately \$1.0 million and the decrease in non-cash stock-based compensation and consulting fees of approximately \$1.0 million.

Net Cash Used in Investing Activities

Net cash used in investing activities was \$1.0 million for the nine months ended September 30, 2024 compared to \$2,707 for the nine months ended September 30, 2023. The cash used in investing activities for the nine months ended September 30, 2024 was for the purchase of available for sale debt securities versus capital expenditures for nine months ended September 30, 2023.

Net Cash Used in / Provided by Financing Activities

Net cash used in financing activities was \$4,319,595 for the nine months ended September 30, 2024 compared to \$1,641,015 for the nine months ended September 30, 2023 which consists of redemptions of amounts due to preferred stock investors.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Not applicable to a smaller reporting company.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

An evaluation was performed under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer, our principal executive officer and principal financial and accounting officer, respectively, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this report. Based on their evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are not effective due to: inadequate segregation of duties consistent with control objectives in the areas over certain payroll and banking systems and user access controls; ineffective processes over period end financial disclosure and reporting including documentation of GAAP disclosure and reporting reviews supporting the financial reporting process and changes to chart of accounts; and ineffective information technology (IT) general computing controls including lack of risk and design assessments supporting IT security policies and procedures, user access, and IT controls within third party contracts. These weaknesses may affect management's ability to determine if errors or inappropriate actions have taken place. Management is required to apply its judgment in evaluating the cost-benefit relationship of possible changes in our disclosure controls and procedures.

We previously disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, that our management, including our Chairman of the Board, principal executive officer and principal financial and accounting officer, assessed the effectiveness of our internal control over financial reporting based on the criteria for effective internal control over financial reporting established in the 2013 Internal Control— Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") and SEC guidance on conducting such assessments. Based on that evaluation, they concluded that, during the period covered by the Annual Report on Form 10-K for the fiscal year ended December 31, 2023, such internal controls and procedures were not effective to detect the inappropriate application of US generally accepted accounting principles.

Based on management's review, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were ineffective as of September 30, 2024. Notwithstanding the material weaknesses described above, our management, including the Chief Executive Officer and Chief Financial Officer, has concluded that financial statements, and other financial information included in this Quarterly Report on Form 10-Q, fairly present in all material respects our financial condition, results of operations, and cash flows as of and for the periods presented in this Quarterly Report on Form 10-Q.

Changes in Internal Controls over Financial Reporting

There was no change in our internal controls over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q, which has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

PART II
OTHER INFORMATION

Item 1. Legal Proceedings.

None.

Item 1A. Risk Factors.

You should carefully review and consider the information regarding certain factors that could materially affect our business, consolidated financial condition or results of operations set forth under Item 1A. Risk Factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023. There have been no material changes from the risk factors disclosed in such Form 10-K. We may disclose changes to risk factors from time to time in our future filings with the SEC.

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

On September 9, 2024, we issued 1,304 shares of Common Stock to Neil Cataldi in exchange for investor relations services.

The foregoing transaction did not involve any underwriters or any public offering. The sale of the above securities were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act (and Regulation D promulgated thereunder) or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering. The recipient of the securities in the transaction represented their intentions to acquire the securities for investment only and not with a view to, or for sale in connection with, any distribution thereof, and appropriate legends were affixed to the securities issued in these transactions. The recipient received or had, through his relationships with us, adequate access to information about us.

Item 3. Defaults upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

Rule 10b5-1 Trading Plans

During the fiscal quarter ended September 30, 2024, none of our directors or executive officers adopted, modified or terminated any contract, instruction or written plan for the purchase or sale of our securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement."

Item 6. Exhibits.

Exhibit
Number

- 3.1 [Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Synaptogenix, Inc. \(incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the SEC on April 4, 2024\).](#)
- 10.1 [Third Amendment to Offer Letter, dated as of June 20, 2024, by and between Alan J. Tuchman, Ph.D. and Synaptogenix, Inc. \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the SEC on June 21, 2024\).](#)
- 10.2 [Form of Purchase Agreement \(incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the SEC on September 11, 2024\).](#)
- 10.3 [Form of Registration Rights Agreement \(incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed with the SEC on September 11, 2024\).](#)
- 10.4 [Engagement Letter, dated September 10, 2024, by and between Synaptogenix, Inc. and GP Nurmenkari Inc. \(incorporated by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K filed with the SEC on September 11, 2024\).](#)
- 31.1 [Certification of the President and Chief Executive Officer pursuant to Rule 13a-14\(a\) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 31.2 [Certification of the Chief Financial Officer pursuant to Rule 13a-14\(a\) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 32.1* [Certification of the President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 32.2* [Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101 The following financial information from this Quarterly Report on Form 10-Q for the period ended September 30, 2024, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Condensed Statements of Operations; (ii) the Condensed Balance Sheets; (iii) the Condensed Statements of Cash Flows; and (iv) the Notes to Financial Statements, tagged as blocks of text.
- 104 Cover Page Interactive Data File (Embedded within the Inline XBRL document and included in Exhibit)

* The certifications attached as Exhibit 32.1 and Exhibit 32.2 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Synaptogenix, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of such Form 10-Q), irrespective of any general incorporation language contained in such filing.

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.

Synaptogenix, Inc.

Date: November 12, 2024

By: /s/ Alan J. Tuchman, M.D.

Alan J. Tuchman, M.D.
Chief Executive Officer
(principal executive officer)

Date: November 12, 2024

By: /s/ Robert Weinstein

Robert Weinstein
Chief Financial Officer, Executive Vice President, Secretary
and Treasurer
(principal financial officer and principal accounting officer)

**CERTIFICATION
OF
ALAN J. TUCHMAN, M.D.
CHIEF EXECUTIVE OFFICER
OF
SYNAPTOGENIX, INC.**

I, Alan J. Tuchman, M.D., Chief Executive Officer of Synaptogenix, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Synaptogenix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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:
 - 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 12, 2024

/s/ Alan J. Tuchman, M.D.

Alan J. Tuchman, M.D.
Chief Executive Officer
(principal executive officer)

**CERTIFICATION
OF
ROBERT WEINSTEIN
CHIEF FINANCIAL OFFICER
OF
SYNAPTOGENIX, INC.**

I, Robert Weinstein, Chief Financial Officer of Synaptogenix, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Synaptogenix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter 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:
 - 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 12, 2024

/s/ Robert Weinstein
Robert Weinstein
Chief Financial Officer, Executive Vice President, Secretary and
Treasurer
(principal financial officer and principal accounting officer)

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

In connection with the Quarterly Report of Synaptogenix, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Alan J. Tuchman, M.D., Chief Executive Officer of the Company, state and certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2024

/s/ Alan J. Tuchman, M.D.

Alan J. Tuchman, M.D.
Chief Executive Officer
(principal executive officer)

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

In connection with the Quarterly Report of Synaptogenix, Inc. (the "Company") on Form 10-Q for the period ending September 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert Weinstein, Chief Financial Officer of the Company, state and certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 12, 2024

/s/ Robert Weinstein
Robert Weinstein
Chief Financial Officer, Executive Vice President, Secretary and
Treasurer
(principal financial officer and principal accounting officer)
