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

FORM 10-K

(Mark one)

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

For the fiscal year ended December 31, 2023

OR

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

For the transition period from to

Commission file number: 001-37942



CervoMed Inc.

(Exact Name of Registrant as specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

30-0645032

(I.R.S. Employer Identification No)

20 Park Plaza, Suite 424

Boston, Massachusetts

(Address of Principal Executive Offices)

02116

(Zip Code)

(617) 744-4400

(Registrant's telephone number, including area code)

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

<u>Title of Each Class</u>	<u>Trading Symbol</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, par value \$0.001 per share	CRVO	NASDAQ Capital Market

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

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

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

Large accelerated filer

Non-accelerated filer

Emerging growth company

Accelerated filer

Smaller reporting company

If an emerging growth company, indicate by check mark if the registrant has elected 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.

Indicated by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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

The aggregate market value of the registrant's common stock beneficially owned by non-affiliates of the registrant, calculated based upon the closing sale price of the common stock as quoted by the Nasdaq Capital Market on June 30, 2023 (the last business day of the registrant's second fiscal quarter), was approximately \$6.8 million.

As of March 26, 2024, 6,170,479 shares of common stock of the registrant were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or parts thereof) are incorporated by reference into the following parts of this Form 10-K: Certain information required in Part III of this Annual Report on Form 10-K is incorporated by reference from the Registrant's Proxy Statement for the 2024 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

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INTRODUCTORY NOTES

Note Regarding Company References and Other Defined Terms

As previously disclosed in our Current Report on Form 8-K filed on August 17, 2023 with the SEC, on August 16, 2023, the Delaware corporation formerly known as “Diffusion Pharmaceuticals Inc.” completed a merger transaction in accordance with the terms and conditions of the Agreement and Plan of Merger, dated March 30, 2023 (the “Merger Agreement”) by and among Diffusion Pharmaceuticals Inc. (“Diffusion”), Dawn Merger Inc., a wholly-owned subsidiary of Diffusion (“Merger Sub”) and EIP Pharma, Inc. (“EIP”), pursuant to which Merger Sub merged with and into EIP, with EIP surviving the Merger a wholly-owned subsidiary of Diffusion (the “Merger”). Additionally, on August 16, 2023, Diffusion changed its name from “Diffusion Pharmaceuticals Inc.” to “CervoMed Inc.”

Prior to the Effective Time (as defined below), in connection with the transactions contemplated by the Merger Agreement, Diffusion effected a reverse stock split of the Company’s common stock, par value \$0.001 per share (“common stock”), at a ratio of 1-for-1.5 (the “Reverse Stock Split”). At the Effective Time, each outstanding share of EIP capital stock was converted into the right to receive 0.1151 shares of Company common stock.

For accounting purposes, the Merger is treated as a reverse recapitalization under US GAAP and EIP is considered the accounting acquirer. Accordingly, EIP’s historical results of operations are deemed the Company’s historical results of operations for all periods prior to the Merger and, for all periods following the Merger, the results of operations of the combined company will be included in the Company’s financial statements. Following the completion of the Merger, the business conducted by the Company became primarily the business conducted by EIP.

Accordingly, unless the context otherwise requires, all references in this Annual Report to (i) “CervoMed,” the “Company,” “we,” “our,” or “us,” refer to the business of EIP for all dates and periods prior to August 16, 2023 and to the business of CervoMed for all dates and periods subsequent to (and including) August 16, 2023 and (ii) “common stock” refer to the common stock, par value \$0.001 per share, of the Company, after giving effect to the Reverse Stock Split. Historical share and per share figures of EIP have been retroactively restated based upon the exchange ratio of 0.1151.

We have also used several other defined terms in this Annual Report, many of which are explained or defined below:

Term	Definition
2015 Equity Plan	CervoMed Inc. 2015 Equity Incentive Plan, as amended
2018 Plan	CervoMed Inc. 2018 Employee, Director and Consultant Equity Incentive Plan, as amended
2020 Notes	the previously outstanding convertible promissory notes of EIP, dated as of December 4, 2020, as amended
2021 Notes	the previously outstanding convertible promissory notes of EIP, dated as of December 10, 2021, as amended
2022 Notes Amendment	the amendments to the 2020 Notes entered into in April 2022
2022 Sales Agreement	our At-The-Market Sales Agreement, dated July 22, 2022, with BTIG, as agent
2023 Notes Amendment	the amendments to the 2020 Notes and 2021 Notes entered into in June 2023
2024 Private Placement	our private placement of an aggregate of 2,532,285 units, each consisting of (i) (A) one share of common stock or (B) one Pre-Funded Warrant in lieu thereof and (ii) one Series A Warrant, for aggregate gross proceeds of up to approximately \$149.4 million, announced March 28, 2024 and expected to be completed on or about April 1, 2024
401(k) Plan	CervoMed Inc. 401(k) Defined Contribution Plan
AD	Alzheimer’s Disease
Annual Report	this Annual Report on Form 10-K
ACA	Affordable Care Act and the Healthcare and Education Reconciliation Act
ACR20	American College of Rheumatology 20
AIA	America Invents Act
AKS	anti-kickback statute
AMP	average manufacturer price
ANDA	abbreviated new drug application

API	active pharmaceutical ingredient
ASC	Accounting Standard Codification of the FASB
AscenD-LB Trial	our Phase 2a clinical trial evaluating neflamapimod for the treatment of patients with DLB, completed in the second half of 2021
ASU	Accounting Standards Update
Bayh-Doyle Act	Bayh-Dole Act of 1980
BID	twice daily
BFC	basal forebrain cholinergic
BTIG	BTIG LLC
Board	the board of directors of the Company
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CCPA	the California Consumer Privacy Act
CPRA	the California Privacy Rights Act
CDR-SB	Clinical Dementia Rating Sum of Boxes test
CGIC	the Alzheimer’s Disease Cooperative Study-Clinician Global Impression of Change
cGMP	current good manufacturing practices
ChAT+ neurons	neurons staining positively for choline acetyl transferase
CMC	chemistry, manufacturing and controls
CMO	contract manufacturing organization
CMS	the U.S. Centers for Medicare & Medicaid Services
Convertible Notes	collectively, the 2020 Notes and the 2021 Notes
CNS	central nervous system
Code	the U.S. Internal Revenue Code of 1986, as amended
CREATES Act	the Creating and Restoring Equal Access to Equivalent Samples Act of 2019
CRL	Complete Response Letter
CRO	contract research organization
CSF	cerebrospinal fluid
DSCSA	Drug Supply Chain Security Act
DGM	deep grey matter
DLB	dementia with Lewy bodies
DNP	the FDA’s Division of Neurology Products
EEA	European Economic Area
EEG	electroencephalogram
Effective Time	the effective time of the Merger on August 16, 2023
EIP Common Stock	the common stock, par value \$0.001, of EIP issued and outstanding prior to the Merger
EMA	European Medicines Agency
EOAD	Early Onset Alzheimer’s Disease
EOT	end of treatment
Exchange Act	Securities Exchange Act of 1934, as amended
Exchange Ratio	the “Exchange Ratio” as defined in the Merger Agreement
FASB	Financial Accounting Standards Board
FCPA	the Foreign Corrupt Practices Act
FDA	U.S. Food and Drug Administration
FDCA	Federal Food, Drug, and Cosmetic Act
FDIC	Federal Deposit Insurance Corporation
FTC	Federal Trade Commission
FTD	frontotemporal dementia
G&A	general and administrative
GBM	glioblastoma multiforme brain cancer
GCP	good clinical practice
GDPR	European Union General Data Protection Regulation
GLP	good laboratory practice
HIPAA	the Health Insurance Portability and Accountability of Act of 1996
HVLT	Hopkins Verbal Learning Test
IMM	irreversible morbidity and mortality
IND	investigational new drug application
IRA	Inflation Reduction Act of 2022

IRB	institutional review board
IT	information technology
LOAD	late onset AD
MA	marketing authorization
MCI	mild cognitive impairment
MRI	magnetic resonance imaging
MSN	medial septal nucleus
Nasdaq	Nasdaq Stock Market, LLC
NbM	Nucleus basalis of Meynert
NCE	new chemical entity
NDA	new drug application
NGF	nerve growth factor
NIA	the National Institute on Aging of the National Institutes of Health
NIA Grant	the \$21 million grant awarded to us by the NIA in January 2023 to support the RewinD-LB Trial
NIH	National Institutes of Health
NOL	net operating loss
NTB	Neuropsychological Test Battery
NYSE	New York Stock Exchange
p38 α	p38 mitogen-activated protein kinase alpha
PBM	pharmacy benefit manger
PD	Parkinson's disease
PDAB	prescription drug affordability board
PDD	Parkinson's disease dementia
PDMA	Prescription Drug Marketing Act
PDUFA	Prescription Drug User Fee Act, as amended
PET	positron emission tomography
POC	proof-of-concept
PPA	primary progressive aphasia
Pre-Funded Warrants	the pre-funded warrants each to purchase one share of common stock at a purchase price of \$0.001 per share expected to be issued in connection with the 2024 Private Placement
PREA	Pediatric Research Equity Act
Proxy Statement	the definitive proxy statement on Schedule 14A for our 2024 Annual Meeting of Stockholders
ptau181	plasma phosphorylated tau at position 181
RA	rheumatoid arthritis
R&D	research and development
Registration Statement	Amendment No. 2 to our Registration Statement on Form S-4, filed with the SEC on July 11, 2023, as amended from time to time
Regulation S-K	Regulation S-K promulgated under the Securities Act
REMS	Risk Evaluation and Mitigation Strategy
RewinD-LB Trial	our Phase 2b clinical trial evaluating neflamapimod for the treatment of patients with DLB, initiated in the second quarter of 2023
RLD	reference-listed drug
ROU	right-of-use
SAB	scientific advisory board
SAE	serious adverse events
SEC	U.S. Securities and Exchange Commission
Section 382	Section 382 of the Code
Securities Act	Securities Act of 1933, as amended
Series A Warrants	the warrants to purchase an aggregate of 2,532,285 shares of common stock at a purchase price of \$39.24 per share expected to be issued in connection with the 2024 Private Placement
TCJA	Tax Cuts and Jobs Act of 2017
TID	three times daily
TSC	trans sodium crocetin
TUG	Timed Up and Go test
UPL	upper payment limit
U.S.	United States of America
US GAAP	U.S. generally accepted accounting principles
USPTO	U.S. Patent and Trademark Office
Vertex	Vertex Pharmaceuticals Incorporated
Vertex Agreement	the Option and License Agreement, dated as of August 27, 2012, by and between EIP Pharma LLC and Vertex, as amended

Explanatory Note Regarding 2024 Private Placement

On March 28, 2024, we entered into a securities purchase agreement with certain purchasers named therein related to the private placement of an aggregate of 2,532,285 units, each comprised of (i) (A) one share of common stock or (B) one Pre-Funded Warrant and (ii) one Series A Warrant. The 2024 Private Placement is expected to close on or about April 1, 2024, subject to customary closing conditions. The aggregate upfront gross proceeds from the 2024 Private Placement are expected to be approximately \$50 million, before deducting offering fees and expenses, and additional gross proceeds of up to approximately \$99.4 million may be received if the Series A Warrants are exercised in full for cash.

The information contained in this Annual Report, including our consolidated financial statements set forth in, “Part II — Item 8 — Financial Statements” and the information regarding our liquidity, capital resources and cash runway set forth in, “Part II --- Item 7 – Management’s Discussion and Analysis of Financial Condition and Results of Operations,” does not reflect the anticipated consummation of, or our anticipated receipt of proceeds from, the 2024 Private Placement. For additional information regarding the 2024 Private Placement, the terms thereof (including the conditions to closing), and our expected use of the net proceeds therefrom, refer to our Current Report on Form 8-K filed with the SEC on March 28, 2024.

Note Regarding Forward-Looking Statements

This Annual Report (including, for purposes of this Note Regarding Forward-Looking Statements, any information or documents incorporated herein by reference) includes express and implied forward-looking statements. By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics and industry change, and depend on the economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Annual Report, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition, liquidity, and prospects may differ materially from the forward-looking statements contained in this Annual Report. In addition, even if our results of operations, financial condition, liquidity, and prospects are consistent with the forward-looking statements contained in this Annual Report, they may not be predictive of actual results or reflect unanticipated developments in future periods.

Forward-looking statements appear in a number of places throughout this Annual Report. We may, in some cases, use terms such as “believes,” “estimates,” “anticipates,” “expects,” “plans,” “intends,” “may,” “could,” “might,” “will,” “should,” “approximately,” or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements also include statements regarding our intentions, beliefs, projections, outlook, analyses or expectations concerning, among other things:

- our cash balances and our ability to obtain additional financing in the future and continue as a going concern;
- the success and timing of our ongoing RewinD-LB Trial and our other clinical and preclinical studies, including our ability to enroll subjects in our studies at anticipated rates and our ability to manufacture an adequate amount of drug supply for our studies;
- obtaining and maintaining intellectual property protection for our current or future product candidates and our proprietary technology;
- the performance of third parties, including contract research organizations, manufacturers, suppliers, and outside consultants, to whom we outsource certain operational, staff and other functions;
- our ability to obtain and maintain regulatory approval of our current or future product candidates and, if approved, our products, including the labeling under any approval we may obtain;
- our plans and ability to develop and commercialize our current or future product candidates and the outcomes of our research and development activities;
- our estimates regarding expenses, future revenues, capital requirements, and needs for additional financing;
- our future obligations under the Vertex Agreement;
- our failure to recruit or retain key scientific or management personnel or to retain our executive officers;
- the accuracy of our estimates of the size and characteristics of the potential markets for our current or future product candidates, the rate and degree of market acceptance of any of our current or future product candidates that may be approved in the future, and our ability to serve those markets;
- the success of products that are or may become available which also target the potential markets for our current or future product candidates;
- our ability to operate our business without infringing the intellectual property rights of others and the potential for others to infringe upon our intellectual property rights;
- any significant breakdown, infiltration, or interruption of our information technology systems and infrastructure;
- our ability to remediate our previously disclosed material weaknesses in our internal controls over financial reporting in a timely manner;
- our ability to successfully integrate the historical businesses of EIP and Diffusion and realize the anticipated benefits of the Merger;
- recently enacted and future legislation related to the healthcare system;
- other regulatory developments in the U.S., European Union, and other foreign jurisdictions;
- our ability to satisfy the continued listing requirements of the Nasdaq or any other exchange on which our securities may trade in the future;
- uncertainties related to general economic, political, business, industry, and market conditions, including the continued availability of funding for the NIA to support disbursements under our previously received grant and
- other risks and uncertainties, including those discussed under the heading "Risk Factors" herein and in our other public filings.

As a result of these and other factors, known and unknown, actual results could differ materially from our intentions, beliefs, projections, outlook, analyses, or expectations expressed in any forward-looking statements in this Annual Report. Accordingly, we cannot assure you that the forward-looking statements contained in this Annual Report will prove to be accurate or that any such inaccuracy will not be material. You should also understand that it is not possible to predict or identify all such factors, and you should not consider any such list to be a complete set of all potential risks or uncertainties. In light of the foregoing and the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. For all forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

Any forward-looking statements that we make in this Annual Report speak only as of the date of such statement, and, except as required by applicable law or by the rules and regulations of the SEC, we undertake no obligation to update such statements to reflect events or circumstances after the date of this Annual Report or to reflect the occurrence of unanticipated events. Comparisons of current and any prior period results are not intended to express any ongoing or future trends or indications of future performance, unless explicitly expressed as such, and should only be viewed as historical data.

Note Regarding Trademarks, Trade Names, and Service Marks

This Annual Report includes trademarks, trade names, and service marks owned by us or other companies. All trademarks, service marks and trade names included in this Annual Report are the property of their respective owners. To the extent any such terms appear without the trade name, trademark, or service mark notice, such presentation is for convenience only and should not be construed as being used in a descriptive or generic sense.

PART I

ITEM 1. BUSINESS

Overview

We are a clinical-stage biotechnology company focused on developing treatments for age-related neurologic disorders. We are currently focused on the development of our lead drug candidate, neflamapimod, an investigational, orally administered, small molecule brain penetrant that inhibits p38 α in the neurons (nerve cells) within the brains of people with neurodegenerative diseases. Neflamapimod has the potential to treat and improve synaptic dysfunction, the reversible aspect of the underlying disease processes in DLB and certain other major neurological disorders, and is currently being evaluated in our ongoing RewinD-LB Trial, a Phase 2b study in patients with DLB funded by a \$21.0 million grant from the NIA. We expect to complete enrollment in the RewinD-LB Trial during the second quarter of 2024 and to report initial results from the placebo-controlled portion of the study during the fourth quarter of 2024.

Our novel approach focuses on reducing the impact of inflammation in the brain, or neuroinflammation, which we believe is a key factor in the manifestation of degenerative diseases of the brain, including DLB. Chronic activation of the enzyme p38 α in the neurons (nerve cells) within the brains of people with neurodegenerative diseases is believed to impair how neurons communicate through synapses (the connections between neurons). This impairment, termed synaptic dysfunction, leads to deterioration of cognitive and motor abilities. Left untreated, synaptic dysfunction can result in neuronal loss that leads to devastating disabilities, significant reliance on a caretaker, long term care living, and, ultimately, death. However, before neuronal loss commences, disease progression in major neurodegenerative disorders, including DLB, initially involves a protracted period of functional loss, particularly with respect to the synapses. We believe that inhibiting p38 α activity in the brain, by interfering with key pathogenic drivers of disease, has the potential to reverse the clinical progression observed in early-stage neurodegenerative diseases, and that it is possible to slow further progression by delaying permanent synaptic dysfunction and neuron death.

We believe we are a leader in the industry in developing a treatment for DLB, as we are the only company of which we are aware with an asset that has shown statistically significant improvements compared to placebo in a Phase 2a clinical trial (our AscenD-LB Trial) and has initiated a Phase 2b clinical evaluation (our ongoing RewinD-LB Trial), from which we expect initial results before the end of 2024. The clinical symptoms in DLB are most directly linked to synaptic dysfunction in cholinergic neurons (neurons producing the neurotransmitter acetylcholine) in a part of the brain named the basal forebrain. Based on available preclinical and clinical data, we believe if neflamapimod is given in the early stages of certain degenerative diseases of the brain, it may reverse synaptic dysfunction and improve neuron health and function. In preclinical studies, neflamapimod has been shown to reverse the neurodegenerative process in the BFC system. Following earlier clinical studies demonstrating blood-brain-barrier penetration, target (p38 α) engagement, and identification of dose-response, we obtained positive Phase 2a clinical data in patients with DLB in our AscenD-LB Trial. Specifically, statistically significant improvement was observed in patients treated with neflamapimod compared to patients treated with placebo on measures of dementia severity (as measured by CDR-SB) and functional mobility (i.e., walking ability, as measured by the TUG test) in the primary (intention-to-treat) analysis that includes all patients randomized into the study that had at least one measurement of the endpoint analyzed. In addition, in a secondary analysis, neflamapimod demonstrated statistically significant improvement compared to placebo in a battery of cognitive tests, particularly with respect to tests that measured attention.

In October 2023, the major clinical neurology journal, *Neurology*, published additional analyses of the AscenD-LB Trial data that further strengthened these conclusions regarding neflamapimod's potential efficacy and identified the DLB patient population most responsive to neflamapimod treatment. In these analyses, the results were stratified by pre-treatment levels of plasma ptau181, which recent scientific literature has identified as a biomarker to differentiate DLB patients with AD-associated co-pathology – a form of mixed dementia which we sometimes refer to as “DLB+AD” – from DLB patients without AD-associated co-pathology – which we sometimes refer to as “pure DLB.” In pure DLB patients, who generally represent early-stage patients with limited neurodegeneration in the hippocampus, the treatment response to neflamapimod in the AscenD-LB Trial was substantial (Cohen's *d* effect size ≥ 0.7 and statistically significant vs. placebo on the CDR-SB, TUG, cognitive tests of attention and working memory) and greater than the overall patient population. In a February 2024 publication in the *Journal of Prevention of Alzheimer's Disease*, results from our prior clinical trials of neflamapimod in AD and DLB were integrated to show not only the demonstrated effects of neflamapimod on cognition and function, but on other biomarkers such as EEG and brain volume and functional connectivity in the basal forebrain.

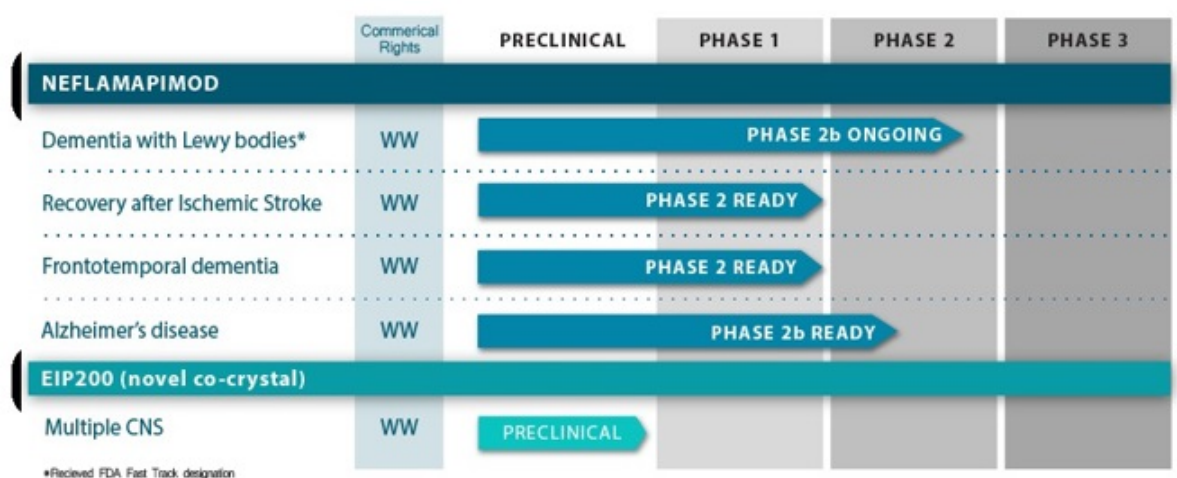
Our ongoing RewinD-LB Trial is a double-blind, placebo-controlled, 16-week Phase 2b study in 160 patients with pure DLB funded by a \$21.0 million grant from the NIA. The trial is intended to confirm the efficacy findings from the AscenD-LB Trial and definitively demonstrate proof-of-concept. We have utilized our subsequent analyses of the AscenD-LB data and the other information described above to optimize the RewinD-LB Trial's design and bolster the trial's statistical power. Critically, the RewinD-LB Trial will exclude patients with Alzheimer's disease related co-pathology as evaluated by plasma ptau181 levels (i.e., the study will only enroll patients with pure DLB) and, to enrich for such patients, the global CDR-SB score at entry will be limited to 0.5 or 1.0. Together with additional modifications to the Phase 2a design related to dosing regimen and primary endpoint, sample size calculations indicate that the RewinD-LB Phase Trial has greater than 95% statistical power (approaching 100%) to meet its primary objective of demonstrating improvement relative to placebo on change in CDR-SB over the course of the study.

We expect to complete enrollment in the RewinD-LB Trial during the second quarter of 2024 and to report initial results from the placebo-controlled portion of the study during the fourth quarter of 2024. The results of the RewinD-LB Trial are intended to provide the data necessary to finalize our design of a Phase 3 clinical trial, the general framework of which, including a 24-week treatment duration, has been agreed upon with the FDA.

In addition to neflamapimod's potential to treat DLB, we believe the benefit of targeting neuroinflammation-induced synaptic dysfunction in the BFC system can be applied to other neurologic indications in which treatment of BFC dysfunction and degeneration would be expected to be clinically beneficial, including as treatment promoting recovery in the three months after ischemic stroke, as a disease-modifying treatment for early-stage Alzheimer's disease, and as a treatment for certain forms of frontotemporal dementia.

Our Pipeline

Set forth below is a table presenting our clinical pipeline:



Our Team

We have assembled a diverse team of experienced company builders and drug developers, complemented by an experienced Board and world-class scientific advisors. This group shares a long-term commitment to execute our strategy, advance the development of neflamapimod, and improve treatment outcomes and quality of life for patients suffering from age-related neurologic disorders. Moreover, we benefit from the significant pharmaceutical development experience of our management team members and directors, several of whom have worked on neflamapimod in the past at Vertex and are well acquainted with the unique properties of the compound for application in DLB and other potential target indications.

- *Our Co-Founder, President and Chief Executive Officer, John Alam, M.D.*, is a biotech industry veteran with more than 30 years' experience and is an industry leader in translational medicine. He has a proven track record of creating value through clinical development success, including having played major roles during the clinical development of five innovative drugs that are now on the market, and is an emerging drug development leader in neurodegenerative diseases, including having been the global head of all R&D activities directed towards neurodegenerative diseases at Sanofi S.A. (Nasdaq: SNY), a top ten global pharmaceutical company. Dr. Alam also has direct experience with neflamapimod from his time at Vertex, where he was Executive Vice President, Medicines Development and Chief Medical Officer. Dr. Alam also led the clinical development of Biogen's first approved drug for the treatment of multiple sclerosis, Avonex.
- *Our Co-Founder and Director, Dr. Sylvie Grégoire, PharmD.*, is also an industry veteran with more than 30 years' experience who previously held executive leadership posts in several multinational life sciences firms. Dr. Grégoire has extensive experience with corporate governance and board operations and is currently also on the board of directors at two public life sciences companies, Novo Nordisk A/S (NYSE: NVO) and Revvity (Nasdaq: RVTY) (formerly known as PerkinElmer, Inc. (NYSE: PKI)), and one private company, F2G; and she previously was chair of Corvidia Therapeutics (acquired by Novo Nordisk), and member of the board of directors of ViFor Pharma (acquired by CSL) and Cubist Pharmaceuticals (acquired by Merck).
- *The Chair of our Board, Joshua S. Boger, Ph.D.*, is an industry veteran who has served in multiple scientific and business leadership roles during his multi-decade career. Dr. Boger founded Vertex in 1989 and served as its Chief Executive Officer from 1992 until 2009, and currently serves as the Executive Chairman of Alkeus Pharmaceuticals. Prior to founding Vertex, Dr. Boger was Senior Director of Basic Chemistry at Merck Sharp & Dohme Research Laboratories in Rahway, NJ, where he headed both the Departments of Biophysical Chemistry and Medicinal Chemistry of Immunology & Inflammation.
- *Our Chief Financial Officer, William Tanner, Ph.D.*, through his more than 20 years' experience as a healthcare research analyst at well recognized investment banks, has expertise and relevant industry experience.
- *Our Chief Operating Officer, Robert J. Cobuzzi, Jr., Ph.D.*, has over 25 years of cross-functional executive and operational leadership experience in the pharmaceutical and biotechnology industries across the areas of corporate development, research & development, and operations, at Endo International Plc, Adolor Corporation, Diffusion Pharmaceuticals, Centocor and AstraMerck. Dr. Cobuzzi also currently serves as a Venture Partner for Sunstone Life Science Ventures and also is Chairman of Sunstone's Business Development Advisory Board.
- *Our SVP of Clinical Development, Kelly Blackburn, MHA*, has more than 30 years of experience in clinical development operations, including senior management positions at aTyr Pharma and Vertex where she held senior global clinical operational responsibility for three major novel therapeutics: Kalydeco® for the treatment of cystic fibrosis, Incivek® for hepatitis C, and Velcade® for multiple myeloma.

- In addition, to provide a strong scientific underpinning for the neflamapimod program, we have surrounded ourselves with thought leaders in the fields of cell biology, intracellular signal transduction, neurotherapeutics, and translational neuroscience. Our SAB is chaired by Dr. Ole Isacson, who serves as Professor of Neurology at Harvard Medical School and is a Founding Director of the Neuroregeneration Research Institute at McLean Hospital. Other members of our SAB include Dr. Lewis Cantley, Professor of Cell Biology at the Dana Farber Cancer Institute, and who previously served as the Director of the Sandra and Edward Meyer Cancer Center at the Weill Cornell Medical Center; Dr. Jeffrey Cummings is the Joy Chambers-Grundy Professor of Brain Science at the UNLV Integrated School of Health Sciences and Director of the Chambers-Grundy Center for Transformative Neuroscience, and Director Emeritus of the Cleveland Clinic Lou Ruvo Center for Brain Health and Professor at the Cleveland Clinic Lerner College of Medicine of Case Western University; and Dr. Heidi McBride, Canada Research Chair in Mitochondrial Cell Biology and as Professor in the Department of Neurology and Neurosurgery at McGill University.

Our Strategy

Our mission is to develop and commercialize innovative medicines that change the course of the disease of patients who suffer from age-related neurologic disorders.

The key elements of our strategy are:

- *Advance clinical development of neflamapimod for treatment of DLB with a focus on moving the program through to Phase 3 initiation in mid-2025.* We initiated our Phase 2b RewinD-LB Trial in the second quarter of 2023 and anticipate completing enrollment in the second quarter of 2024. The efficacy data, which would come at the end of the four-month placebo-controlled portion of the trial, are expected in the fourth quarter of 2024. With those results in hand, we plan to meet with the FDA in an end-of-Phase 2 meeting to finalize the design of a single 24-week treatment duration Phase 3 clinical trial, which we are targeting to initiate in mid-2025. As the design of the Phase 3 clinical trial will largely replicate the RewinD-LB Trial design, we believe that success in the RewinD-LB Trial will be a meaningful predictor of the potential for a successful clinical outcome in our planned Phase 3 trial.
- *Advance clinical development of neflamapimod for other disease indications.* Neflamapimod's mechanism of action with respect to treating neuro-inflammation and, more specifically, cholinergic dysfunction and degeneration provides opportunities to advance our drug in a range of neurologic disorders, in addition to DLB, in which targeting and treating BFC dysfunction and degeneration would be expected to provide substantial clinical benefit. Our anticipated second indication is as a three-month treatment following ischemic stroke to promote neurologic recovery, particularly of motor function. A potential third indication is as disease-modifying treatment early-stage AD, when the BFC degeneration is a major driver of disease progression. In addition, we believe there is strong scientific basis for evaluating neflamapimod in certain forms of frontotemporal dementia.
- *Commercialize neflamapimod ourselves and/or in collaboration with one or more partners.* If neflamapimod receives regulatory approval, we intend to be prepared to commercialize as soon as practicable in the market(s) where it is first approved, if at all, which we expect to be in North America and/or Europe. In the future, we may seek partners to seek approval and commercialize our products in other regions.
- *Expand our pipeline through in-licensing and acquisitions.* In the future, we intend to leverage our expertise in drug development and business development, as well as our understanding of translational neuroscience with respect to synaptic dysfunction, to opportunistically evaluate product candidates that are complementary to neflamapimod in our pursuit of novel therapies for DLB, AD and other age-related neurologic disorders.

Neflamapimod in Dementia with Lewy Bodies

Our Approach

Our approach is based on an understanding of the mechanism by which neuroinflammation leads to the initiation and establishment of the neurodegenerative process. The process of neurodegeneration starts with dysfunction of synapses, i.e., the interconnections between neurons. Treating synaptic dysfunction has emerged as a major therapeutic objective to address progression of neurodegenerative diseases, particularly in the early stages prior to the onset of significant cell death. Importantly, in animal models, while neurodegeneration is irreversible, synaptic dysfunction has been observed to be reversible. In addition, even in animal models of rapidly progressive neurodegeneration (e.g., prion disease), interventions that reverse synaptic dysfunction both improve function and “arrest” the neurodegenerative process. Thus, therapeutic interventions that target synaptic dysfunction have the potential to both reverse and slow disease progression in the early stages of neurodegenerative dementias.

The basal forebrain, and specifically nerve cells producing the neurotransmitter acetylcholine (i.e., “cholinergic neurons”), play critical roles in controlling and optimizing a wide range of cognitive, motor, and visual tasks. Synaptic dysfunction in the basal forebrain cholinergic system is the primary pathogenic driver of disease expression and progression of DLB. Basal forebrain cholinergic dysfunction also plays a major role in disease progression in the early stages of AD, and basal forebrain cholinergic dysfunction is rate limiting for optimal recovery after ischemic stroke.

In collaborative work conducted with the New York University Langone Medical Center, and as published in the journal *Nature Communications*, we have demonstrated that neflamapimod targets the specific molecular mechanisms underlying basal forebrain cholinergic dysfunction, and eventually degeneration, and, as discussed in subsequent sections, can successfully reverse disease progression in animals with basal forebrain cholinergic dysfunction and degeneration.

Capitalizing on Our Strengths

We believe that the following competitive strengths will allow us to execute on our mission to develop and commercialize neflamapimod as a disease modifying innovative drug treatment for patients who suffer from DLB and other neuro-inflammatory age-related neurologic disorders:

- *Our approach to degenerative diseases of the brain is highly differentiated and has the potential to be the first to market specific drug therapy for DLB.* Our approach focuses on reducing the impact of neuroinflammation. Neuroinflammation is directly linked with the initiation of the neurodegenerative process through synaptic dysfunction, which results in a reduction or elimination of the ability of the affected neurons to transfer information. Neflamapimod targets neuro-inflammation and, particularly, the molecular mechanisms within neurons that lead to synaptic dysfunction, thereby both improving cognitive function and slowing down the process that leads to neuronal loss. Currently, there are no approved therapies for DLB and there is limited drug development in this area, with neflamapimod being, to our knowledge, the only disease-modifying approach that has demonstrated significant improvements on clinical outcome measures in a clinical trial in DLB.
- *Neflamapimod has the potential to meet a significant unmet medical need and achieve substantial commercial return.* We believe that neflamapimod can address the high unmet medical need with respect to both the cognitive and motor aspects of DLB. DLB is the third most common chronic degenerative disease of the brain (after Alzheimer’s disease and Parkinson’s disease), with an estimated 700,000 individuals with the disease in each of the U.S. and European Union. Despite this prevalence and high unmet medical need, there are currently no FDA or EMA approved treatments for DLB. Further, patients are referred to neurologists to treat the disease. The specialty nature of neflamapimod, if approved, combined with the prevalence of the disease should present a significant commercial opportunity, including through reimbursement, based on the impact on patients’ quality of life and ability to function, reduction of caregiver burden and reduction of health care costs associated with DLB, among other factors.

- *Neflamapimod has the potential to improve cognitive and motor function (i.e., restore function), providing the opportunity to demonstrate clinical efficacy in Phase 2 and, if successful, provide a meaningful predictor of the potential for a successful clinical outcome in Phase 3.* A major challenge in developing effective drug treatments for chronic neurodegenerative diseases, particularly AD, has been that approaches to date do not show improvement in disease outcomes in Phase 2 clinical trials (i.e., trials of less than six-month duration). Instead, demonstration of clinical efficacy depends on clinical trial duration of at least 12 to 18 months and large subject numbers (~1,000 or more), effectively requiring Phase 3 trials designed to show an effect of slowing disease progression relative to placebo treatment. As a result, Phase 2 clinical trials data may not provide a meaningful predictor of the potential for a successful clinical outcome in Phase 3 in AD. In contrast, in early-stage DLB, because there is less extensive neuronal loss and fixed (i.e., irreversible) clinical deficits compared to AD, there is the potential to reverse disease progression and improve function in Phase 2 clinical trials. Neflamapimod has previously been shown to reverse disease progression and restore function in preclinical studies and has demonstrated improvement as compared to placebo on clinically meaningful outcomes in a 16-week Phase 2a clinical trial, particularly in patients with pure DLB. If the results of our AscenD-LB Trial are confirmed in the ongoing RewinD-LB Trial (the placebo-controlled portion of which will also be of 16 weeks duration) with a statistically significant difference between placebo and neflamapimod treatment on the primary endpoint, we believe we will have demonstrated proof-of-concept (i.e., have established the neflamapimod is efficacious in the treatment of DLB). In addition, based on discussions we have had with the FDA, and pending confirmation in an end-of-phase 2 meeting with the FDA that we plan to have after Phase 2b, approval for neflamapimod could be obtained with the conduct of a single 24-week treatment duration Phase 3 study involving a few hundred subjects, although there can be no assurances. As the design of the Phase 3 clinical trial will largely replicate the RewinD-LB Trial design, we believe that success in the RewinD-LB Trial will be a meaningful predictor of the potential for a successful clinical outcome in our planned Phase 3 trial. See section titled “Item 1A. Risk Factors - Risks Related to the Company’s Product Development and Regulatory Approval” for a further description of these factors and uncertainties.
- *Neflamapimod has been extensively tested in animals and humans.* The safety and tolerability profile has been extensively evaluated and is well understood. Specifically, long-term toxicology studies of neflamapimod have been completed and the drug has been administered to over 300 volunteers and subjects to date (including over 150 subjects in Phase 2 clinical trials in either DLB or AD), some of whom have received up to 30 times the dose we are using in our ongoing RewinD-LB Trial and currently plan to utilize in our planned Phase 3 trial.

DLB Background

Unmet Medical Need

Dementia with Lewy bodies is the second most common neurodegenerative dementia (after AD), representing 10-20% of the dementia population. The Lewy Body Dementia Association estimates there are 1.4 million individuals in the United States affected with Lewy body dementia, which includes both PDD and non-Parkinson’s DLB. As non-Parkinson’s DLB and PDD are prevalent in the United States at an approximate ratio of 1:1, there are approximately 700,000 individuals with DLB in the United States. Furthermore, the prevalence in European countries is similar to that in the United States, and so we believe there also are approximately 700,000 individuals with DLB in the European Union as well. Despite this prevalence, there are currently no approved treatments specifically for DLB in the U.S. or the European Union.

DLB is characterized by progressive dementia and fluctuating cognition (particularly deficits in attention), visual hallucination, motor dysfunction (disturbances in gait and balance) and sleep disturbances. With respect to life expectancy, in a large cohort of DLB and AD cases (251 DLB, 222 AD), after controlling for age at diagnosis, comorbidity, and antipsychotic prescribing, the survival for DLB was shorter compared to AD, with a median (average) survival of less than four years with DLB (3.3 years for males and 4.0 for females), as compared to nearly seven years with AD (6.7 years for males and 7.0 years for females). Antecedent to death, the time progression to severe dementia is also shorter by nearly two years with DLB compared to AD.

Separate from survival and progression to severe disease, even in the mild-to-moderate stages, with deficits occurring in both cognitive and motor function, the disease burden with respect to quality of life and caregiver burden, is greater in DLB than in AD. Furthermore, patients with DLB are more frequently admitted to general hospitals and utilize inpatient care to a substantially higher degree than do those with AD or the general elderly population. Most importantly, in a large prospective study, mild dementia patients with DLB were admitted to a nursing home after only a median of 1.8 years from presentation and diagnosis, nearly two years shorter than the 3.7 years in the AD group.

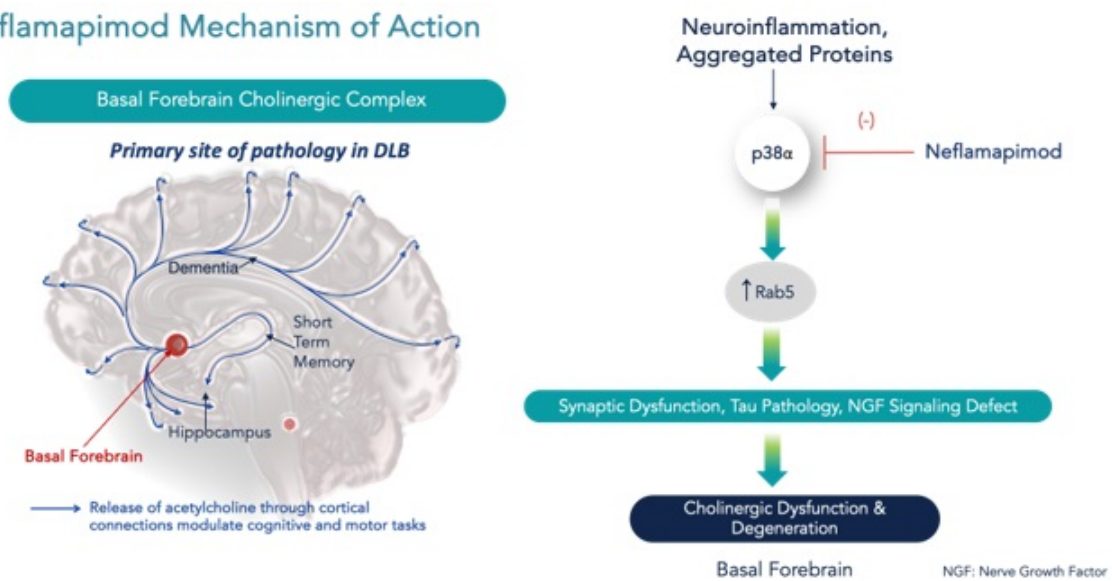
Accordingly, DLB in afflicted persons often progresses quickly and severely impacts not only the daily lives of patients suffering from the disease but that of their caregivers. There are currently no disease-modifying treatments available for DLB, so management of DLB currently focuses on relief of symptoms, including its cognitive and parkinsonian (e.g., tremor) manifestations. No approaches have been shown to clinically slow neuronal loss or prevent cognitive decline, and there are no approved therapies for treating the underlying disease process or disease-modifying drugs in Phase 3 clinical trials. Though not approved for DLB, cholinesterase inhibitors are used in its management, with some limited and transient improvement in cognition and a reduction in the frequency and severity of visual hallucinations. However, despite treatment with cholinesterase inhibitors, the cognitive and functional impairments progress rapidly, caregiver burden remains high, and new treatments are needed for these patients. With respect to the motor component of DLB, dopaminergic medications (e.g., carbidopa/levodopa) work less well in DLB as compared to PD and patients with DLB generally have a limited response to these medications, which are in any case poorly tolerated in this patient population; a reason for the poor response is that DLB is primarily a disease of the cholinergic system, rather than the dopaminergic system.

Scientific Rationale

Recent evidence indicates that the primary pathology in DLB is in the basal forebrain cholinergic system, dysfunction and degeneration of which drives neurodegeneration in other regions of the brain. A series of publications, largely from the laboratories and colleagues of Prof. William Mobley at UCSD and Prof. Ralph A. Nixon at NYU Langone and the Nathan Kline Psychiatric Institute, have defined the molecular mechanisms that lead to neurodegeneration of cholinergic neurons. As shown in the figure below, the cholinergic degeneration is believed to result from inflammation and various aggregated proteins that lead to aberrant activation of the protein Rab5, a master regulator of endocytosis and endosomal trafficking, further leading to impaired retrograde axonal transport and a block in NGF signaling from the synapses at the ends of nerve fibers (or “axons”) back to cell body of the cholinergic neuron in the basal forebrain. The resulting loss of support of neuronal health that NGF provides is then believed to lead to dysfunction, and, eventually, degeneration of cholinergic neurons, which are particularly vulnerable to this pathogenic process because of their very long fibers.

Molecular Mechanisms Underlying Cholinergic Neurodegeneration in DLB and Point of Intervention for Neflamapimod

Neflamapimod Mechanism of Action



Early-stage patients with pure DLB (i.e., the ~50% of patients without AD-related co-pathology assessed by biomarkers) have relatively limited neurodegeneration and neuronal loss in the cortical regions of the brains, including and particularly in the hippocampus. Moreover, based on a range of animal and human pathology studies, the cholinergic degenerative process in the basal forebrain is believed to be reversible. The cholinergic neurons in that region of the brain do not die, rather they stop functioning normally (i.e., stop producing acetylcholine) and atrophy, or shrink in size. However, as those neurons are still alive, with successful pharmacological treatment they can be rescued and the disease process reversed.

Neflamapimod was hypothesized to reduce Rab5 protein activity – a key therapeutic target in this pathogenic model for cholinergic degeneration in DLB – because of scientific literature showing that the immediate target of neflamapimod, p38 α kinase, is the major activator of Rab5. Based on that hypothesis, neflamapimod was evaluated in a preclinical study in an animal model intended to evaluate neflamapimod's effects on basal forebrain cholinergic atrophy and, later, in our Phase 2a AscenD-LB Trial in patients with DLB. We believe that the results of these studies, through demonstration of reduction in Rab5 activity and reversal cholinergic dysfunction & degeneration, demonstrate neflamapimod's potential to treat synaptic dysfunction, the reversible aspect of the underlying neurodegenerative processes in the basal forebrain cholinergic system that cause disease in DLB. We also have obtained and published results from a pilot clinical study in patients with early AD that demonstrate neflamapimod treatment increases the volume of the basal forebrain, as well its functional connectivity to the cortex, as assessed by structural and functional MRI, respectively.

Clinical Development Plan

AscenD-LB Trial: Our Completed Phase 2a Trial in Dementia with Lewy Bodies

The AscenD-LB Trial was a Phase 2a double-blind, placebo-controlled, 16-week treatment, exploratory clinical trial of neflamapimod in mild-to-moderate DLB conducted at 22 centers in the United States and two centers in the Netherlands. 91 subjects were enrolled between October 2019 and March 2020 and randomized to receive 40 mg neflamapimod capsules or matching placebo capsules (randomized 1:1) for 16 weeks. The dosing regimen was based on weight, with trial participants weighing less than 80 kg receiving capsules BID and those weighing greater than or equal to 80 kg receiving capsules TID. All subjects had to have already been receiving oral cholinesterase inhibitor therapy for at least three months (stable dose for greater than six weeks) and continued such therapy without dose modification during the trial.

The AscenD-LB Trial was an exploratory clinical trial designed to evaluate the effects of neflamapimod against a range of clinical endpoints. In the primary analysis of the AscenD-LB Trial, which included all patients enrolled and evaluated for treatment effects, neflamapimod demonstrated improvement compared to placebo in dementia severity (assessed by CDR-SB, $p=0.023$ vs. placebo) and functional mobility (gait or walking ability as assessed by the TUG test, $p=0.044$ vs. placebo). In additional analyses, at the highest dose (40mg TID), significant improvement on a cognitive test battery, or NTB, was evident as compared to placebo ($p=0.049$); however, significant improvement compared to placebo on the NTB was not evident in the primary analysis. In addition, encouraging positive trends on the ten-item Neuropsychiatric Inventory were seen, particularly with respect to visual hallucinations, where a significant reduction in frequency relative to placebo was seen.

This primary analysis of the AscenD-LB Trial data showing neflamapimod significantly improved dementia severity and motor function was published in the major scientific journal *Nature Communications* in September 2022.

Primary Analysis of Major Efficacy Endpoints in AscenD-LB Trial of Neflamapimod in DLB

		40mg BID + 40mg TID		40mg TID	
		Mean difference vs. placebo (95% CI)	p-value	Mean difference vs. placebo (95% CI)	p-value
Dementia Severity	Clinical Dementia Rating Sum of Boxes (CDR-SB)	-0.45 (-0.83, -0.06)	0.023	-0.56 (-0.96, -0.16)	0.007
Cognitive Testing	Neuropsychological Test Battery (NTB) Composite z-score	0.04 (-0.11, 0.19)	>0.2	0.17 (0.00, 0.35)	0.049
	Attention Composite z-score	0.14 (-0.06, 0.35)	0.17	0.28 (0.04, 0.51)	0.023
Motor Function	Timed and Go Test (TUG)	-1.4 (-2.7, -0.1)	0.044	-1.4 (-2.6, -0.2)	0.024

On-study (all time-points) results; change from baseline analysis utilizing Mixed Model for Repeated Measures. Number of participants: 41 for placebo, 20 each for 40mg BID and 40mg TID.

We believe the lack of significant effect in the primary analysis on the cognitive testing (NTB) results are attributable to the combination of (1) the inclusion of subjects receiving the lower, 40 mg BID dose of neflamapimod, a dose that did not achieve targeted therapeutic blood drug concentrations, and (2) “ceiling effects”, (i.e. that patients with disease have exogenous limits on how much they can improve on a cognitive test) resulting from two separate potential causes. First, all patients in the study were receiving cholinesterase inhibitor therapy, which is known to improve outcomes on cognitive testing in patients with DLB; that is, with having received benefit with cholinesterase inhibitor therapy, there was a limit to how much better perform with neflamapimod treatment, particularly with low dose neflamapimod treatment. Second, the deficits in executive function at baseline were very mild and, as a result, the tests evaluating executive function (two of six in the NTB) could not have demonstrated an effect.

Based on recent scientific literature demonstrating that DLB subjects with abnormally elevated plasma ptau181 (tau protein phosphorylated at residue 181) have AD associated co-pathology (specifically amyloid plaque and/or tau pathology by PET scan or CSF analysis), additional pre-specified analyses of the AscenD-LB data stratified by baseline plasma ptau181 were conducted and identified the pure DLB patient population as the optimal patient population for the RewinD-LB Trial and any future phase 3 clinical trials. Compared to subjects with DLB without elevated plasma ptau181 (i.e., with “pure” DLB), subjects with DLB with elevated plasma ptau181 have more extensive neuronal loss (neurodegeneration) and, therefore, would be expected to be less responsive to treatment. As shown in the table below, patients in the AscenD-LB Trial with pure DLB had an average higher treatment response (evaluated by Cohen’s *d* effect size), compared to the average response in the overall study, and demonstrated significant improvement in cognitive tests of Attention, the CDR-SB, the TUG test, and in a rest of recognition memory (International Shopping List Test recognition index) with Cohen’s *d* treatment effect size that was greater than 0.7 for each of these endpoints, indicating clinical effects that are moderate-to-large in magnitude. By comparison, in published studies in the scientific literature, the cholinesterase inhibitors have Cohen’s *d* effect size of approximately 0.3 in the treatment of AD or DLB.

Magnitude of 40mg TID Neflamapimod Treatment Effect vs. Placebo in Overall Patient Population and in the Pure DLB Patient Population) of the AscenD-LB Trial*

	Overall Study Population				Patients With Pure DLB (Plasma ptau181 < cutoff)			
	N= NFMD TID, Placebo	Difference ¹ (95% CI)	p-value	Cohen's d Effect size	N= NFMD TID, Placebo	Difference ¹ (95% CI)	p-value	Cohen's d Effect size
NTB	19,37	+0.17 (0.00,0.35)	0.049	0.47	11,19	+0.21 (-0.07,0.49)	0.13	0.56
Attention	19,36	+0.28 (0.04,0.51)	0.023	0.41	11,18	+0.42 (0.07,0.78)	0.023	0.78
CDR-SB	20,38	-0.56 (-0.96, -0.16)	0.007	0.31	11,22	-0.60 (-1.04, -0.06)	0.031	0.74
TUG	20,38	-1.4 (-2.6, -0.2)	0.024	0.50	11,20	-3.1 (-4.7, -1.6)	<0.001	0.74
ISLT	20,42	+0.32 (-0.48,1.12)	NS	0.15	11,22	+2.1 (0.0,4.2)	0.053	0.55
ISLT- RECOGNITION	19,39	+0.47 (-0.17,1.11)	0.15	0.17	10,21	+1.4 (0.02,2.5)	0.024	1.0

* By convention the magnitude of a treatment is considered small when the Cohen's *d* effect size between 0.2 and, moderate when it is 0.4 to 0.8 and large when it is 0.8 or greater.

In September 2023, the results of these additional analyses of the AscenD-LB Trial were published in *Neurology*, the medical journal of the American Academy of Neurology. A subsequent publication in *Molecular Neurodegeneration* provides a combined evaluation of the findings in the *Neurology* and *Nature Communications* articles that makes the case for advancing neflamapimod as a treatment for DLB.

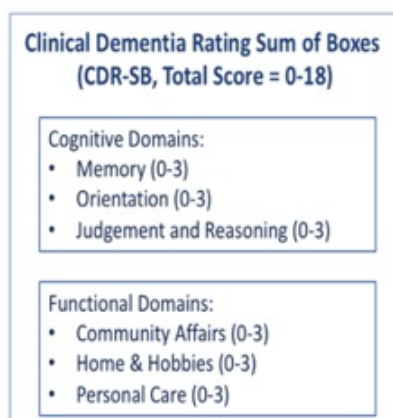
RewinD-LB Trial: Our Ongoing Phase 2b Trial in Dementia with Lewy Bodies

In the second quarter of 2023, we initiated our ongoing RewinD-LB Trial, a Phase 2b clinical trial of neflamapimod in subjects with DLB funded by a \$21.0 million grant from the NIA, and, in August 2023, we announced dosing of the first patient in the study. We believe the design of the RewinD-LB Trial has positioned the study for success, as it is based on our findings and learnings from the AscenD-LB Trial, including the following:

- Based on the dose response analysis of the AscenD-LB Trial and observations in prior AD studies, the optimal dose was identified as 40 mg TID, which will be the only dosing regimen used in the RewinD-LB Trial.
- Clinical endpoints that can detect effects on both cognitive and motor function (specifically, CDR-SB and TUG) better distinguish drug treatment from placebo than tests that are purely focused on evaluating cognition. Moreover, in AD, CDR-SB is accepted by regulatory authorities as an approval endpoint. Accordingly, we have chosen CDR-SB as the primary endpoint in the RewinD-LB Trial.
- Subjects with pure DLB (i.e., those without AD co-pathology as evidenced by increased concentrations of ptau181) appear to have a greater response to treatment. Therefore, we have chosen to exclude subjects with elevated (i.e., abnormal) levels of ptau181 in the RewinD-LB Trial. We believe that excluding subjects with abnormal ptau181 substantially increases the statistical power to demonstrate treatment effects in clinical trials of neflamapimod in DLB.

Accordingly, in the RewinD-LB Trial, neflamapimod will be administered orally, 40 mg TID, with a second group receiving matching placebo. Each treatment group will include 80 subjects (enrolling a total of 160 subjects) diagnosed with DLB by consensus criteria, including having an abnormal dopamine transporter scan. Subjects with elevated plasma ptau181 (i.e., having evidence of AD co-pathology) will be excluded. Treatments (neflamapimod or placebo) will be administered for 16 weeks in the main trial (i.e., double-blind, placebo-controlled portion of the study), with a 36-week open label treatment extension for subjects completing the initial 16-weeks of the trial. Following completion of informed consent procedures, subjects will enter the screening phase of the trial. Once eligibility is confirmed and before the first dose of study drug, subjects will be randomly assigned on 1:1 basis to placebo or neflamapimod treatment. Dosing will start on day 1 following completion of all baseline procedures. During the placebo-controlled portion of the trial, subjects will return to the clinic at the end of weeks 2, 4, 8, 12 and 16.

The primary objective of the trial is to demonstrate that neflamapimod, compared with placebo, improves dementia severity, as assessed by change from baseline to week 16 in CDR-SB score. The CDR-SB is designed to assess both cognition and function, and is obtained by clinicians rating the severity of symptoms across 6 domains – memory, orientation, judgment & problem solving, community affairs, home & hobbies, and personal care – after a semi-structured interview with the patient and a reliable informant (e.g. family member) on a 0–3 scale for each domain (total range 0–18, with a higher score indicating worse dementia).



Secondary objectives include further evaluation of the safety and tolerability of neflamapimod and treatment effects on (1) cognition, assessed by a DLB-specific cognitive test battery, (2) motor function, as assessed by the TUG test, and (3) global rating of treatment effect, assessed by the CGIC. Tertiary endpoints will examine whether neflamapimod affects neuropsychiatric outcomes as assessed by the NPI-12, effect on fluctuations in cognition as assessed by the Dementia Cognitive Fluctuations Scale, impact on resting-state EEG (as well alpha-reactivity evaluated by EEG) and in a sub-set of subjects, basal forebrain atrophy assessed by structural MRI.

Sample size was calculated via simulations conducted utilizing the data in the Phase 2a study for the major clinical endpoints in the neflamapimod 40mg TID and placebo groups, generating for each patient a change from baseline for each endpoint at individual visits over the course of the simulated clinical study, and then analyzing the result using the linear mixed effects model for repeated measures that will be utilized to analyze the Phase 2b study. Based on the simulation of 100 clinical trials with 80 patients per treatment group, and assuming a 10% dropout rate, the RewinD-LB Trial has approximately 85% power with the NTB, 95% power with TUG, and greater than 95% power (approaching 100%) with the primary endpoint, CDR-SB, to detect a treatment effect at a significance level of 0.05.

We expect to complete enrollment in the RewinD-LB Trial during the second quarter of 2024 and to report initial results from the placebo-controlled portion of the study during the fourth quarter of 2024. The results of the RewinD-LB Trial are intended to provide the data necessary to finalize our design of a Phase 3 clinical trial, the general framework of which has been agreed upon with the FDA.

Planned Phase 3 Development in DLB Based on Success in Phase 2b Clinical Trial

We met with the FDA in January 2020, after completion of the AscenD-LB Trial and availability of the preliminary analysis of the results, in an end-of-phase 2 meeting to discuss potential Phase 3 clinical designs that may support approval of neflamapimod for the treatment of DLB. In that meeting, the FDA stated that a single Phase 3 clinical trial of six months' treatment duration may be sufficient to support approval of neflamapimod if the trial demonstrated robust, clinically meaningful effects on cognition and on either function or a global measure (e.g., CGIC). Based on those discussions, we believe that if the RewinD-LB Trial demonstrates significant effects on the primary CDR-SB endpoint (a clinically meaningful measure of cognition and function), the result would be highly predictive of success in Phase 3, as the Phase 3 clinical trial would be designed to replicate the Phase 2b findings over six months (an additional two months compared to the four months in Phase 2b). Further, the number of subjects to be enrolled in a Phase 3 trial, which at the time of the January 2020 meeting was proposed to be 250 subjects, would be adjusted based on treatment effect size observed in the Phase 2b results to provide >95% statistical power for the primary efficacy endpoint. We are also evaluating CGIC in our planned Phase 2b trial for incorporation as a potential endpoint in the Phase 3 clinical trial. The size of a Phase 3 clinical trial and certain other aspects of the Phase 3 trial (e.g., choice of secondary endpoints) would be discussed with the FDA in a second end-of-phase 2 meeting that we would expect to schedule after the primary efficacy data are available from the ongoing RewinD-LB Trial, which we anticipate being available in the fourth quarter of 2024.

NIA Grant

In January 2023, we were awarded a \$21.0 million grant from the NIA that is estimated to fully fund development costs associated with the Rewind-LB Trial. The NIA Grant funds will be disbursed over the course of the trial as costs are incurred and, during the year ended December 31, 2023, we received total cash funding of approximately \$6.2 million.

In addition, in December 2023, we submitted a request for supplemental funds in the amount of \$4.0 million, of which, if approved, \$3.9 million would be received in the current year and the remainder would be received in next the funding year. The request for supplemental funds was initially reviewed by the NIA in January 2024 but, due to the NIA currently working under the Continuing Resolution, completion of the review was delayed and the request is currently scheduled to be reviewed for approval in May 2024.

We currently expect to receive the remaining 10%, or \$0.8 million, of the previously approved year 2 funding upon U.S. congressional approval of a final appropriations bill, the supplemental amount of \$4.0 million following NIA review of our supplement request, and the year 3 funding of \$6.2 million in February 2025.

Prior Clinical Studies of Neflamapimod

Phase 2 Clinical Trials Evaluating Neflamapimod in Alzheimer's Disease

Prior to our more recent clinical trials in patients with DLB, two Phase 2a studies of neflamapimod in AD were completed in early 2017. Results from these earlier studies demonstrated that neflamapimod is well tolerated, crosses the blood brain barrier and is pharmacologically active in the brain, including providing us with data around blood-barrier penetration target engagement (biological activity in the brain), and an understanding of dose-response, i.e., the completion of the steps in early clinical studies to successful CNS drug development.

One of these studies, Reverse-SD, was a Phase 2b clinical trial in subjects with AD. 161 subjects were enrolled at 38 sites in the Czech Republic (5 sites), Denmark (3 sites), Netherlands (3 sites), United Kingdom (11 sites) and United States (16 sites) and were randomized 1:1 to receive neflamapimod 40 mg capsules or matching placebo capsules twice daily with food for 24 weeks. Inclusion criteria were as follows: men and women aged 55 to 85 years, with CDR-Global score of 0.5 or 1.0 (i.e., with mild AD); CDR memory sub-score of at least 0.5; MMSE score of 20 to 28, inclusive; positive biomarker for AD, as defined by CSF A β 1-42 <1000 pg/mL and phospho-tau/A β 1-42 >0.024 in the Roche Elecsys® immunoassay; receiving either no AD-specific therapy or on a stable dose monotherapy (either cholinesterase inhibitor or memantine; dual therapy excluded).

Including all subjects in the analysis, there was no evident difference between the neflamapimod and placebo groups in the primary clinical efficacy endpoint, the combined change from baseline to week 24 in the z-scores of HVLT of Total Recall and Delayed Recall. However, in the analysis of CSF biomarkers, there were statistically significant effects of neflamapimod treatment, with a reduction relative to placebo, in the change from baseline to week 24 in CSF protein levels of phosphorylated tau (p-tau181, p=0.01 vs. placebo) and total tau (p=0.03 vs. placebo), and a trend on CSF neurogranin (p=0.07 vs. placebo).

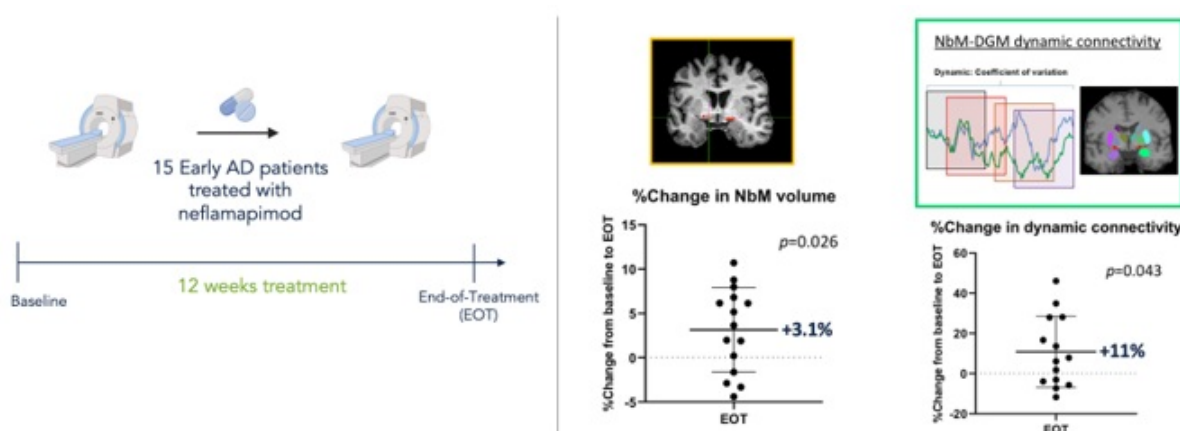
Because in the scientific literature tau pathology has been shown to be downstream (is a consequence) of p38 α kinase activity, the effect of neflamapimod on CSF levels of ptau181 and total tau demonstrates target engagement, i.e., these CSF results are consistent with “target engagement” within the brains of subjects. Target engagement is the industry term for the drug having the intended pharmacological effect in humans that would be expected based on its mechanism of action; in this case, that neflamapimod is inhibiting p38 α activity. Furthermore, as CSF ptau181 and CSF total tau are considered to reflect neurodegeneration and synaptic dysfunction, respectively, we believe the results also provide objective evidence of neflamapimod impacting the neurodegenerative process in patients, including specifically on synaptic dysfunction.

As a single dose of neflamapimod was utilized in the trial, pre-specified pharmacokinetic pharmacodynamic analyses were conducted to evaluate the results for potential dose-dependency. These analyses showed improvement, relative to the placebo group, in tests of episodic memory in neflamapimod-treated subjects with the highest (top quartile) trough plasma drug concentrations; with positive trends evident both for the primary endpoint (combined change in z-scores of HVLt total recall and delayed recall) and the major secondary endpoint of change in Wechsler Memory Scale Combined Immediate and Delayed Recall composites. This analysis provided critical dose-response information as it indicated that 40mg BID was too low a dose, but that a dose of 40mg TID would achieve therapeutically effective drug concentration levels in the blood.

Results of Imaging of Basal Forebrain by MRI in Patients with Early AD after Treatment with Neflamapimod

With the development and availability of analytic MRI-based techniques to evaluate potential treatment effects on the basal forebrain, the MRI images from patients with mild AD (n=15) from one of our Phase 2a studies were reanalyzed by a specialized neuroimaging group at the Amsterdam Medical Center. The goal of this exploratory analysis, which was presented at the AD/PD meeting in Gothenburg, Sweden in April 2023, was to assess by MRI the treatment effects of neflamapimod on the NbM, the largest cluster of cholinergic neurons in the basal forebrain. Structural and MRI assessments had been conducted as part of the study at baseline and following 12 weeks of treatment with neflamapimod. The additional analysis demonstrated that the NbM volume was statistically significantly higher at EOT (mean 3.1% higher vs. baseline, $p=0.026$). Eight of 15 subjects had greater than 3% NbM higher volume at EOT, as compared to baseline. Treatment with neflamapimod was also associated with a statistically significantly higher functional dynamic connectivity between the NbM and DGM at EOT (mean 11% higher vs. baseline, $p=0.043$), with six of 13 subjects showing a greater than 10% higher dynamic NbM-DGM connectivity at EOT, as compared to baseline. We believe the potential reversal of atrophy and recovery of function in neflamapimod-treated subjects in this trial suggests a restoration of cholinergic neurons in the NbM in line with the data generated in previous preclinical studies that demonstrated neflamapimod reversed the neurodegenerative process in the basal forebrain cholinergic system.

Neflamapimod treatment was associated with increased basal forebrain volume and functional connectivity.



NbM – Nucleus basalis of Meynert, the largest cluster of cholinergic neurons in the basal forebrain; DGM – Deep Grey Matter
 Lin C-P, Noteboom S, Bet M, Alam J, Prins N, Barkhof F, Jonkman L, Schoonheim M, Oral Presentation at AD/PD™ 2023, Gothenburg, Sweden, 1 April 2023

Clinical Safety Results

Adverse events seen in all completed Phase 2 clinical trials evaluating neflamapimod in both CNS and non-CNS disorders are shown in the table below. This includes 149 subjects with either AD or DLB who have received neflamapimod for up to 24 weeks at either 40 mg BID or TID or 125 mg BID. Among this cohort of patients with CNS disorders, the most commonly reported adverse events were headache (15 events, 10%), respiratory infection (11 events, 7%), diarrhea (11 events, 7%), fall, (11 events, 7%), and somnolence (seven events, 5%), all mild to moderate in severity. Headache, diarrhea, and somnolence appear to have the strongest association with neflamapimod treatment.

There were five Serious Adverse Events reported in the 149 subjects with AD and DLB treated with neflamapimod (vs. eight who were administered placebo), involving hypokalemia, myeloma, head injury, brain tumor, and brain lesion, none of which were considered related to neflamapimod.

Adverse Events in Neflamapimod Phase 2 Clinical Trials of \geq 12 weeks duration in AD or DLB

	Placebo (N=128)	Neflamapimod (N=140)
Falls	8 (6%)	11 (8%)
Diarrhea	7 (6%)	10 (7%)
Headache	6 (5%)	9 (6%)
Common Cold/URI	8 (6%)	7 (5%)
Nausea	4 (3%)	6 (4%)
Somnolence	3 (2%)	4 (3%)
Vomiting	4 (4%)	2 (1%)
Fatigue	5 (3%)	1 (1%)

With respect to liver enzyme abnormalities, during 12 weeks of dosing at 250mg BID (i.e., four-fold higher daily dosing than in the recently initiated Phase 2b trial) in 44 subjects with rheumatoid arthritis, elevations in liver transaminase levels were noted in six subjects (14%). Additionally, in one subject (1%) participating in the Reverse-SD 24-week trial in mild AD who received 40 mg BID neflamapimod, ALT and AST levels increased to three times the upper limit of normal. In each instance, subjects were asymptomatic, there were no associated increases in bilirubin, and the elevations resolved with treatment discontinuation.

In the most recently completed AscenD-LB trial involving 91 subjects with DLB, neflamapimod was well tolerated with no treatment discontinuations due to study drug-related adverse events. There were four SAEs reported in the placebo group (haematochezia, internal bleeding, intraparenchymal hemorrhage, asthma exacerbation) and two among the neflamapimod BID treatment group (brain lesions, head injury), all of which were considered unrelated to treatment. In addition, one SAE (brain tumor diagnosis) was reported 34 days after the last dose in a neflamapimod BID recipient. There were no SAEs or early treatment discontinuations in the neflamapimod TID recipients. Liver enzyme abnormalities were not observed in the AscenD-LB trial.

Preclinical Studies

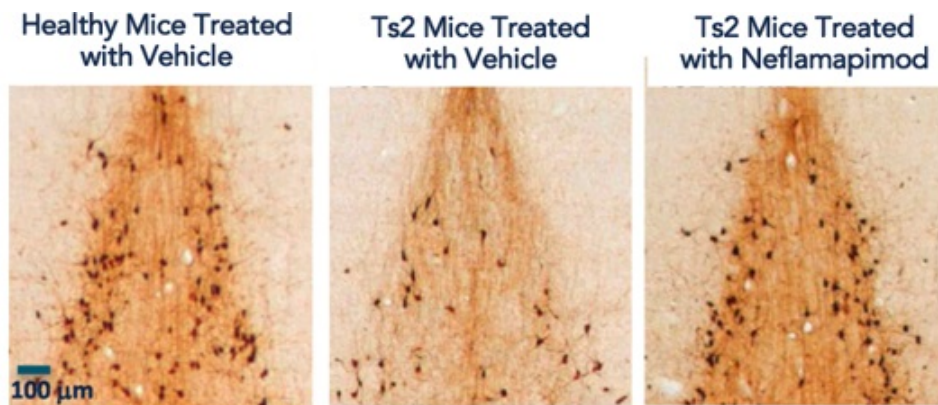
Ts2 Transgenic Mice

Nearly all individuals who have Down Syndrome, characterized by trisomic chromosome 21, develop AD by their fourth decade of life, and have typical AD pathology when autopsied at death. This may be explained by chromosome 21 containing the gene for amyloid-precursor-protein, which is the gene linked to familial or genetic early onset AD in humans. The Ts2 transgenic mouse model of Down Syndrome utilizes mice that are partially trisomic at chromosome 16, which is the mouse equivalent of chromosome 21. Along with developmental behavioral abnormalities, Ts2 mice develop typical early onset dementia pathology, including endosomal abnormalities and cholinergic neurodegeneration in the basal forebrain cholinergic system. Accordingly, Ts2 mice provide an ideal opportunity to evaluate the effects of drug treatment on basal forebrain cholinergic dysfunction and degeneration.

To evaluate the potential of neflamapimod on the neurodegenerative process, the effects of neflamapimod were evaluated in Ts2 mice. Wild-type mice, referred to as either WT or 2N, and Ts2 mice were treated over 28 days, twice daily, with either vehicle or 3 mg/kg of neflamapimod in vehicle, with nine mice in each group. Treatment was initiated at 6-7 months of age, representing a time point at which endosomal pathology and cholinergic neuronal loss is developing. To assess for effects on cholinergic neurodegeneration, ChAT+ neurons were quantitated in the region of the forebrain that is enriched for cholinergic neurons, which is known as the MSN.

At the end of treatment, consistent with current scientific literature, the number of cholinergic neurons in the MSN region was significantly decreased in vehicle-treated TS2 mice compared to vehicle-treated WT mice ($p < 0.001$). This effect was reversed with neflamapimod treatment, with the number cholinergic neurons in the MSN increased in neflamapimod-treated TS2 mice compared to vehicle-treated TS2 mice, and the number of ChAT+ neurons were similar to those seen in WT mice ($p < 0.001$). Neflamapimod treatment also normalized Rab5 activity and phosphorylated (i.e., activated) p38 MAP kinase and its downstream substrates.

Neflamapimod restores numbers of cholinergic neurons in basal forebrain (i.e., reverses disease progression) in Ts2 transgenic mouse.



Cholinergic neurons, as assessed by staining positive for ChAT+ in the MSN of the basal forebrain, in wild-type treated with vehicle or Ts2 transgenic mice after treatment for four weeks with either vehicle or neflamapimod.

The finding of reversal of disease progression is consistent with studies in the scientific literature that suggest that “loss” of cholinergic neurons in the basal forebrain cholinergic system is not due to cell death. Rather, the “degeneration” and loss of such basal forebrain cholinergic neurons appears to be due to a loss of cholinergic phenotype and functional properties, and neuronal shrinkage, all of which in animal studies can be reversed. That is, the effect of reversing disease progression, evidenced by increased number of cholinergic neurons. This is not a regenerative effect. Rather, we believe it reflects that treatment with neflamapimod is restoring the function of diseased neurons (those that don’t express ChAT), allowing them to express ChAT. There is also evidence from studies in early AD, that cholinergic phenotype loss, rather than frank neuronal death and loss, occurs in the basal forebrain of humans as well. We believe this is consistent with the results obtained from the MRI evaluation of neflamapimod-treated AD patients discussed above in whom an increase in the volume of basal forebrain cholinergic neurons was observed in the NbM.

Aged Rat Model

To obtain preclinical proof-of-principle and confirm the role of p38 α in the development of synaptic dysfunction, we tested neflamapimod in a rat model of age-related cognitive decline. When evaluated in the Morris-Water-Maze test of spatial learning, rats show cognitive deficits starting at 20 to 22 months of age, which is equivalent to approximately 60 years of age in humans. Of note, because the deficits in Morris-Water-Maze performance can be fully reversed by implanting healthy cholinergic neurons in the basal forebrain, those deficits are believed to be due to basal forebrain cholinergic dysfunction and degeneration.

The results of these tests showed that treatment with neflamapimod fully reversed the learning deficits in the Morris-Water-Maze test in 20- to 22-month-old rats. Specifically, the performance of aged rats on the last day of testing (day 17) showed that animals treated with neflamapimod at the optimal dose performed significantly better than vehicle-treated aged rats ($p=0.007$ for latency; $p=0.01$ for distance). Further, the performance of neflamapimod-treated aged rats was similar to that of young rats (i.e., fully reversed cognitive deficits). The figure below further details the results of these tests, in which two groups of 15 rats each (aged rats with cognitive deficits and a control group of young rats) received vehicle or active drug treatment for 21 days. The Morris-Water-Maze test was conducted on days 4-8 and days 11-17.

Neflamapimod's Potential in Additional Indications

Acute Indication: Recovery after Ischemic Stroke

We believe the therapeutic benefit of targeting neuroinflammation-induced synaptic dysfunction is not limited to chronic neurodegenerative diseases. A drug that improves synaptic function could also be considered for evaluation of the potential to improve brain function after acute neurological injury. In the future, we may investigate neflamapimod in the treatment of certain acute indications such as ischemia-induced stroke. We have generated preclinical evidence suggesting that neflamapimod could improve recovery after ischemic stroke in an animal model.

A treatment to improve recovery from stroke remains a significant unmet medical need. Every year, more than 795,000 people in the United States suffer a stroke, and approximately 610,000 of these are first or new strokes. About 87% of all strokes are ischemic strokes, in which blood flow to the brain is blocked. The prognosis for recovery from stroke is influenced by a number of different factors, including stroke severity, type of stroke, location of infarct, co-morbidity with other disorders, and other clinical complications. The majority of survivors of an acute stroke demonstrate some level of neurological recovery during the three to six months after the initial event. Despite this initial period of recovery, 40 to 50% of patients exhibit persistent neurological deficits.

During the last 10 years, the medical and scientific communities have gained a better understanding of the mechanisms underlying neuronal recovery following a stroke. The major translational opportunity for therapeutics that target recovery after stroke is the time window in which intervention must be initiated. Rather than just the first few hours after the stroke (as is the case with neuroprotection, i.e., acute stroke therapy to reduce the size of stroke), the window for therapeutics that could improve recovery is days and even weeks after an acute stroke. Waiting to initiate therapy until 48 hours after the stroke allows inclusion of a homogenous patient population as the diagnosis and extent of the stroke can be definitively established by that time in most patients (the exception being the minority who have a “stuttering” stroke). As a result, a POC study in stroke recovery is in the range 50-100 patients per treatment arm, compared to 500+ per treatment arm in neuroprotection trials.

The scientific rationale for evaluating neflamapimod to promote recovery after stroke is that the basal forebrain cholinergic system plays a critical role in recovery after ischemic stroke, particularly motor function recovery. The BFC system is suppressed by residual inflammation in the weeks and months after the acute stroke event. Neflamapimod, through the same mechanisms operating in DLB, would be expected to reverse the suppression of BFC function, leading to improved recovery of motor function. Supporting that concept is our preclinical data with neflamapimod demonstrating significant improvement in neurological recovery vs. vehicle treatment, and TUG results from the AscenD-LB clinical trial where positive effects of neflamapimod on basal forebrain mediated control of movement were observed in the clinic.

In a preclinical study of neflamapimod that evaluated effects on recovery after stroke, which has been published in a peer-reviewed scientific journal, transient ischemia of sufficient duration was induced in rats such that significant neurologic disability developed without mortality, and the neurologic disability did not substantially reverse during follow-up without therapy. These rats were then treated with either vehicle or one of two different doses of neflamapimod. The three groups in the study were: vehicle control ($n=18$), 1.5 mg/kg neflamapimod ($n=21$) and 4.5 mg/kg neflamapimod ($n=21$). Six weeks of neflamapimod treatment, starting at 48-hours after stroke, led to substantial improvement on multiple parameters of neurologic function compared to vehicle controls ($p<0.001$ for each of global neurologic scores; motor and sensory specific tests).

We have no immediate plans to initiate a clinical trial evaluating neflamapimod as a treatment to improve recovery from acute stroke. However, we have had extensive discussions with stroke experts and have designed a 120-patient, 12-week treatment, placebo-controlled Phase 2 POC trial to improve recovery after ischemic stroke in which treatment would be initiated between 3 and 7 days after the acute stroke event that could be initiated to evaluate the effects of neflamapimod, subject to available funding.

Early-Stage Sporadic Alzheimer's Disease

The defining clinical characteristics of early-stage, sporadic AD are deficits in episodic memory (the recollection of everyday events). The driving pathology of sporadic AD is in the hippocampus, the part of the brain in which episodic memory is formed. Accordingly, the amyloid beta therapies have been developed as a treatment for AD based on preclinical data demonstrating that amyloid beta has deleterious effects on synaptic function in the hippocampus. However, scientific literature indicates that degeneration of the basal forebrain cholinergic system also contributes to disease expression and progression in AD, particularly in the early stages, and we believe that a reason for the limited success of amyloid beta directed therapies is that they do not impact disease progression in these basal forebrain cholinergic neurons. In addition to the effects on the BFC system, in experimental studies, p38 α expression increased amyloid beta production, while reducing p38 α activity decreased amyloid pathology. Further, neflamapimod treatment of transgenic AD mice reduced amyloid beta levels and, in Ts2 mice, neflamapimod reduced the expression of the major enzyme (beta secretase) that produces amyloid beta. Based on these observations, we believe there is a strong rationale for neflamapimod, either as a standalone therapy or in combination with amyloid beta directed therapies.

In addition to the mechanistic and pre-clinical evidence of the potential use of neflamapimod in AD, the Ascend-LB Trial demonstrated clinical outcome results and biomarker results in the CSF and on basal forebrain volume in patients with early AD that we believe suggest neflamapimod's potential use in treating AD.

We have no current plans to initiate a clinical trial evaluating neflamapimod for treatment of early-stage sporadic AD. Rather, assuming success in our ongoing Rewind-LB Trial, we would likely pursue clinical development in early-stage sporadic AD in parallel with our Phase 3 development of neflamapimod in pure DLB, subject to available funding.

Frontotemporal Dementia

FTD is a neurodegenerative disorder characterized by progressive deterioration in behavior, personality, and language abilities, typically affecting individuals between the ages of 40 and 65 including an estimated 50,000 to 60,000 individuals in the U.S. alone. Unlike AD, which primarily targets memory, FTD primarily affects the frontal and temporal lobes of the brain, leading to changes in social conduct, emotional regulation, and decision-making. There are several subtypes of FTD, including the behavioral variant FTD, the most common subtype (approximately half the patients with FTD) and primary progressive aphasia, or PPA, each presenting with distinct symptom profiles. PPA, a subtype of FTD itself, has three main variants: nonfluent/agrammatic variant PPA, semantic variant PPA, and logopenic variant PPA. The prevalence of these PPA subtypes varies, with approximately 40% of PPA patients being nonfluent/agrammatic variant PPA, 40% being semantic variant PPA, and 20% being logopenic variant PPA. As the disease progresses, individuals with FTD may require increasing levels of care and support, with management focusing on alleviating symptoms and maximizing function.

The rationale for potentially evaluating neflamapimod as a treatment for FTD is based on the atrophy of the BFC system also being a driver of disease and the mechanisms that neflamapimod targets (e.g. defects in axonal transport) being operative in FTD. Specifically, when assessed by MRI, the volume of the basal forebrain is reduced, relative to age-matched healthy control, most prominently in patients who semantic variant PPA and behavioral variant FTD and in patients who have "tauopathies" (i.e., patients at autopsy who have tau pathology, rather than TDP-43 pathology). Moreover, in March 2024, at the AD/PD 2024 scientific conference in Lisbon, Portugal, academic collaborators from University College London presented data that showed that p38 MAPK inhibitors generally, and neflamapimod specifically, enhanced axonal transport in a transgenic mouse model of FTD (rg4510 transgenic harboring P301L mutation). Based, in particular, on the transgenic mouse results, we plan to initiate discussions with experts in field and design a phase 2a study to evaluate neflamapimod in the most appropriate subtype of FTD for the mechanism, subject to available funding.

Additional Neflamapimod Development Background

Discovery and Early Development by Vertex

Neflamapimod was originally discovered at Vertex, which initiated clinical investigations in 1999 to determine the effects of the drug on RA. During its clinical investigations of neflamapimod, Vertex completed single and multi-dose Phase 1 studies and initiated Phase 2a development in rheumatoid arthritis. A total of approximately 150 healthy volunteers and patients received neflamapimod in Vertex-sponsored studies for up to one month at 750 mg twice daily and up to 3 months at a dose of 250 mg twice daily.

In a Phase 2a trial in active rheumatoid arthritis conducted by Vertex, a total of 59 healthy volunteers and patients (44 on active drug of 250 mg, and 15 on placebo, twice daily) were enrolled in a 12-week treatment. In this trial, a statistically significant effect of neflamapimod administration on ACR20 response rate was demonstrated ($p = 0.027$ in the primary endpoint analysis: area-under-the-curve of ACR20 response over the 12-week trial period). In a pharmacokinetic/pharmacodynamic analysis, neflamapimod administration also reduced C-reactive protein and IL-6 levels with increasing cumulative drug exposure.

Neflamapimod was generally well tolerated in this RA Phase 2a trial. The most common adverse events associated with neflamapimod were abdominal pain (21% of the 44 healthy volunteers), diarrhea (18%), infection (16%), headache (14%), increased aspartate aminotransferase (14%) and increased alanine aminotransferase (11%). No treatment-emergent neurologic events were seen. Regarding liver function test abnormalities, transaminase levels returned to normal after treatment discontinuation and were not associated with bilirubin elevations. Liver enzyme elevations are a well-known dose-dependent clinical side effect of p38 MAPK inhibitors. In the case of neflamapimod however, we believe the threshold for inducing liver enzyme elevation is a dose level of 250 mg twice daily when administered for more than 4 weeks, which on a daily dose level is four-fold higher than the 40mg TID dose regimen we are moving forward in DLB and other CNS indications (500 mg per day in RA vs. 120 mg per day in DLB and other CNS indications).

Vertex ultimately discontinued its pursuit of neflamapimod in the early 2000s to focus on the clinical development of a therapy for rheumatoid arthritis with a different p38 α inhibitor, which, unlike neflamapimod, does not enter the brain. Neflamapimod lay dormant with Vertex until we expressed our interest in exploring the drug for other indications. See "Vertex Agreement" below for additional information.

Toxicology

A full chronic repeated dose toxicology program has been completed in rodents (rats) and non-rodents (dogs). In the rodent species, in the six-month toxicology study, no human relevant findings were evident at dose levels that provided plasma neflamapimod drug concentration levels approximately ten-fold higher than those achieved in the AD clinical trials. In shorter-term studies, the primary target organ was the liver, with findings commencing at plasma drug concentration levels 20-fold higher than the AD clinical trial exposures. In the non-rodent species, in 9- and 12-month toxicology studies, dose dependent findings were evident beginning at plasma neflamapimod drug concentrations more than ten-fold higher than achieved with 40 mg twice daily in AD clinical trials, with minimal to equivocal findings at that dose level in the liver, bone marrow and CNS. The CNS findings demonstrated damage to axons, or nerve fibers, primarily in the spinal cord. p38 α and p38 β have been reported to have a role in transport of proteins in axons, and therefore we believe these toxicity findings are related to the inhibition of both p38 α and p38 β at the very high doses administered in the non-rodent studies. The doses we are using in our clinical trials are at least ten-fold lower than the doses at which these effects were observed.

Regulatory Status

We submitted an IND application to the FDA in February 2015. The FDA cleared our application in March 2015, and the IND remains open and active.

The FDA granted neflamapimod Fast Track designation for the treatment of DLB in October 2019.

Following a review of the long-term animal toxicology studies discussed above, the FDA placed a partial clinical hold on our first Phase 2a Trial in mild AD (Study 303) in August 2015, limiting administration of neflamapimod to doses that lead to plasma drug levels which provide at least a 10-fold safety margin to the plasma drug levels in animals that in long-term animal toxicity studies had previously led to minimal or equivocal findings in the liver, bone marrow and CNS. At the present time, this partial clinical hold effectively limits our clinical dosing in the United States to 40 mg of neflamapimod three times daily in patients with a weight of greater than or equal to 50kg (110 pounds), based on agreements with the FDA and on our current understanding of plasma drug levels achieved with neflamapimod in humans. As our current plans across our indications do not envision surpassing this dose level, we do not expect this partial clinical hold to impact our ongoing and planned clinical trials.

In Europe, clinical trial applications in support of our clinical trials have been reviewed and approved by the national regulatory authorities in each of the Netherlands, United Kingdom, Czech Republic and Denmark. In addition, the Agence Nationale de Sécurité du Médicament et des Produits de Santé (the French national regulatory authority) has reviewed and approved a clinical trial application for an investigator-initiated study of neflamapimod in Toulouse, France.

Vertex Agreement

In August 2012, based on our team's previous direct experience with this compound and our understanding of its profile and emerging science around p38 α in the brain, we entered into the Vertex Agreement, which granted us an option to acquire an exclusive worldwide license to develop and commercialize neflamapimod for the diagnosis, treatment and prevention of AD and other neurodegenerative diseases. In August 2014, we exercised that option to acquire the license to neflamapimod.

The Vertex Agreement contains certain milestone events and the related payments that we would be obligated to make to Vertex if and when such events occur. Each milestone payment is payable only once for each distinct licensed product, upon the first occurrence of the applicable milestone event. The first expected milestone events concern filing of an NDA, with the FDA for marketing approval of neflamapimod, in the U.S., or a similar filing for a non-U.S. major market, as specified in the Vertex Agreement. The Vertex Agreement also provides that we will make royalty payments to Vertex in the event aggregate net sales, as defined in the agreement, for a commercialized licensed product meet specified thresholds. Such royalties will be on a sliding scale of percentages of net sales in the low- to mid-teens, depending on the amount of net sales in the applicable years. We are also obligated to make a milestone payment to Vertex upon net sales reaching a certain specified amount in any 12-month period. The Vertex Agreement states that royalties will be reduced by 50% during any portion of the royalty term when there is no valid claim of an issued patent within specified patent rights covering the licensed product. We also have the right to deduct, on a country by country basis, from royalties otherwise payable to Vertex under the terms of the Vertex Agreement, 50% of all royalties, upfront fees, milestones and other payments paid by us or any of our affiliates or sublicensees to third parties under licenses that are necessary for the development, manufacture, sale or use of a licensed product, provided that in no event will the royalty payable to Vertex be reduced to less than 50% of the rates specified in the Vertex Agreement, subject to certain adjustments specified therein. In the aggregate, our potential milestone payment obligations, all of which relate to development milestones, under the Vertex Agreement are up to \$122.0 million. To date, we have made an aggregate of \$100,000 in payments to Vertex. In connection with our obligations under the Vertex Agreement, there is no minimum annual expenditure requirement. Our diligence obligations under the Vertex Agreement have included the making of annual expenditures in connection with the development of neflamapimod, commencement of a Phase 2 clinical trial of neflamapimod, and the commercial sale of neflamapimod within six months of market approval.

The Vertex Agreement provides that we may sublicense the rights granted to us by Vertex, in whole or in part, to a third party (through multiple levels of sublicensing) (i) who is providing services to us in connection with the manufacture or development of the licensed product, solely for the purpose of providing such services, or (ii) with the prior written consent of Vertex, which shall not be unreasonably withheld.

The license term under the Vertex Agreement is deemed to have commenced on August 21, 2014, and continues until the expiration of the royalty term, unless sooner terminated in accordance with the terms of the Vertex Agreement. The royalty term commences on the first commercial sale of a licensed product and ends upon the later of (i) the date of expiration, unenforceability or invalidation of the last valid claim of certain specified underlying patent rights, or (ii) ten years after the date of such first commercial sale. Upon the expiration of the royalty term, the license will convert to a perpetual, fully paid-up non-royalty bearing license with the same scope.

The Vertex Agreement may be terminated by us for any reason upon 90 days' prior written notice to Vertex if such termination occurs before receipt of the first marketing approval of a licensed product, and otherwise upon twelve months' prior written notice to Vertex. Either party may terminate the Vertex Agreement if the other party is in material breach of its obligations thereunder, following a 60-day notice and cure period, or if the other party files for bankruptcy, reorganization, liquidation, receivership, or an assignment of a substantial portion of assets to creditors. The Vertex Agreement also provides that in the event we materially breach any of certain specified diligence obligations as to a specific major market, Vertex's sole remedy for such breach, following the applicable notice and cure period, will be to terminate the license as to such specific major market country.

EIP200 – Novel Co-Crystal of Neflamapimod

We have an issued patent, set to expire in 2038, in the United States for novel co-crystals of neflamapimod with identified, specific, Generally Recognized as Safe compounds that have the potential to improve the solubility and other physical properties of neflamapimod. The development of one of these co-crystals as a product would be supported by composition of matter protection afforded by this patent, providing additional patent protection if we developed such a co-crystal product ourselves, the opportunity to license such a product to another pharmaceutical company while retaining the rights to neflamapimod and other potential benefits. The ability to develop one or more of these co-crystal products requires a fuller evaluation of the potential manufacturing processes than has been performed to date.

Trans Sodium Crocetininate

Prior to the Merger in August 2023, Diffusion focused on developing novel therapies that may enhance the body's ability to deliver oxygen to areas where it is needed most. The most advanced of these product candidates, TSC, has been investigated and developed to enhance the diffusion of oxygen to tissues with low oxygen levels, also known as hypoxia. Although we have paused all development activity related to TSC, including the initiation of Diffusion's previously announced Phase 2 study of TSC in newly diagnosed GBM patients, we intend to continue to attempt to identify sale or out-licensing transactions for the Company's TSC-related assets.

Sales and Marketing

We do not currently have any infrastructure for the sales, marketing or distribution of an approved drug product. In order to market and successfully commercialize neflamapimod or any other future product candidate, to the extent it or they are approved, we must either develop these capabilities internally or make arrangements with third parties to perform these services. We may also collaborate with strategic partners that have experience in these fields. There are significant expenses and risks involved in establishing our own sales, marketing and distribution functions, including our ability to hire, retain and appropriately incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Alternatively, to the extent that we depend on third parties for such services, any revenues we receive will depend upon the efforts of those third parties, and there can be no assurance that such efforts will be successful.

Manufacturing

We do not own or operate manufacturing facilities, nor do we have plans to develop our own manufacturing operations in the foreseeable future. Our lead product candidate, neflamapimod, is a small molecule drug that is manufactured using commercially available technologies.

Our RewinD-LB Trial is being conducted with drug substance (or API) that has already been manufactured. This drug substance was manufactured at an established commercial CMO, that is approved for and manufactures drug both for investigational use and marketed products. We would anticipate utilizing this CMO for clinical trials beyond the Phase 3 clinical trial in DLB, as well as potentially for commercial use if neflamapimod is approved. However, supplies of our neflamapimod drug substance could be interrupted from time to time, and we cannot be certain that alternative supplies could be obtained within a reasonable timeframe, at an acceptable cost, or at all. For a further description of certain risks related to our manufacturing, see *“Item 1A. Risk Factors – Risks Related to the Company’s Clinical Development and Regulatory Approval – The Company’s reliance on third parties for the production of neflamapimod may result in delays in the Company’s clinical trials or regulatory approvals and may impair the development and ultimate commercialization of neflamapimod, which would adversely impact the Company’s business and financial position.”*

We also currently rely on a third-party CMO (different than that for drug substance) for the manufacture of our neflamapimod drug product. We have used the same manufacturer for our neflamapimod drug product in all our clinical trials to date. If neflamapimod is ultimately approved for commercial sale, we expect to continue to rely on third-party contractors for manufacturing the drug product. Although we intend to do so prior to any commercial launch, we have not yet entered into long-term agreements for the commercial supply of either drug substance or drug product with our current manufacturing providers, or with any alternate manufacturers.

Competition

Given the potential market opportunity for the treatment of DLB and other neurodegenerative diseases, an increasing number of established pharmaceutical firms and smaller biotechnology/biopharmaceutical companies are pursuing a range of potential therapies for these diseases in various stages of clinical development.

While there are numerous companies pursuing AD disease modifying approaches, we believe there are a limited number of companies and disease modifying approaches for DLB. With regard to public biopharmaceutical companies that we would consider competitive with our approach, and actively evaluating treatments in DLB, we are aware of Eisai Co. Ltd., Cognition Therapeutics, Inc. and Athira Pharma, Inc., all of whom remain in clinical stage development of their potential DLB treatments. None of these companies, however, are developing a treatment specifically targeting patients with pure DLB, the target patient population of our ongoing RewinD-LB Trial.

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. We face potential competition from many different sources, including pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize, including neflamapimod, may compete with existing therapies and new therapies that may become available in the future.

Our competitors may have significantly greater financial resources, an established presence in the market, and significantly greater expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and reimbursement and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific, sales, marketing and management personnel, establishing clinical trial sites and subject registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

The key competitive factors affecting the success of neflamapimod, and any other product candidates that we develop to address DLB and other CNS diseases, if approved, are likely to be their efficacy, safety, convenience, price, the level of competition, and the availability of reimbursement from government and other third-party payors. Our potential commercial opportunity could also be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic products.

Intellectual Property

We strive to protect and enhance the proprietary technologies, inventions and improvements that we believe are important to our business, including seeking, maintaining and defending patent rights, whether developed internally or licensed from third parties. Our policy is to seek to protect our proprietary position by, among other methods, pursuing and obtaining patent protection in the United States and in jurisdictions outside of the United States related to our proprietary technology, inventions, improvements and our product candidates that are important to the development and implementation of our business.

We have made a number of discoveries related to our lead product candidate, neflamapimod, which are reflected in ten main patent families, each of which we wholly own (dates below are without consideration of potential patent term extension, see section titled “—Patent Term Restoration” below):

- The first patent family relates to methods of treating patients suffering from AD, as well as methods of reducing amyloid plaque burden. In this family, we hold issued patents in the United States, Europe, Japan, China, Canada, Australia, and Hong Kong. These patents are set to expire in 2032.
- The second patent family relates to the use of neflamapimod for improving cognition. In this family, we hold issued patents in the United States, Europe, Japan, and a pending application in China. These patents are set to expire in 2035.
- The third patent family relates to co-crystals of neflamapimod in this family, we hold an issued patent in the United States. This patent is set to expire in 2038.
- The fourth patent family relates to methods for promoting recovery of function in patients who have suffered acute neurologic injuries, including those resulting from various forms of stroke. In this family, we hold an issued patent in the United States, Europe, and Japan, and pending applications in Korea and China. These patents are set to expire in 2035-2036.
- The fifth patent family relates to methods of treating patients suffering from dementia. In this family, we have an issued patent the United States for the treatment to patients with MCI to improve episodic memory and a pending application in Europe. Patents that issue in this family, if any, are expected to expire in 2037.
- The sixth patent family relates to formulations of neflamapimod, including pharmaceutical compositions for oral administration exhibiting desirable pharmacokinetics and processes for the manufacture thereof. In this family, we have an issued patent in the United States that is set to expire in 2039.
- The seventh patent family relates to the treatment of DLB. In this family we have pending applications in the United States, Europe, Japan, China, Canada, and Hong Kong. Patents that issue in this family, if any, are expected to expire in 2040.
- The eighth patent family is co-owned by Boston University and relates to methods of treating prion disease. In this family, we have a pending application in the United States. Patents that issue in this family, if any, are expected to expire in 2040.
- The ninth patent family relates to treatment of gait dysfunction related to neurodegenerative disease. An International Application is pending. Patents that issue in this family, if any, are expected to expire in 2041.

- The tenth patent family relates to treatment of a subpopulation of patients having DLB but no substantial Alzheimer’s like tau pathology. Patents that issue in this family, if any, are expected to expire in 2042.

Pursuant to the terms and conditions of the Vertex Agreement, Vertex has granted us an exclusive license under specified Vertex patent rights, including U.S patent No. 5,945,418, which relates to the composition of matter for neflamapimod. This patent expired in 2017.

Individual patents extend for varying periods depending on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, patents issued for regularly filed applications in the United States are granted a term of 20 years from the earliest effective non-provisional filing date. In addition, in certain instances, a patent term can be extended to recapture a portion of the USPTO delay in issuing the patent as well as a portion of the term effectively lost as a result of the FDA regulatory review period. However, as to the FDA component, the restoration period cannot be longer than five years and the total patent term including the restoration period must not exceed 14 years following FDA approval. The duration of foreign patents varies in accordance with provisions of applicable local law, but typically is also 20 years from the earliest effective filing date. However, the actual protection afforded by a patent varies on a product-by-product basis, from country to country and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patent.

We also rely upon trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements and invention assignment agreements with our collaborators, employees and consultants, as we determine necessary. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our collaborators, employees and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Our commercial success will also depend in part on not infringing upon the proprietary rights of third parties. It is uncertain whether the issuance of any third-party patent would require us to alter our development or commercial strategies, or our drugs or processes, obtain licenses from third parties or cease certain activities.

From time to time, we may find it necessary or prudent to obtain licenses from third party patent owners. Where licenses are available at reasonable cost, such licenses are considered a normal cost of doing business. In other instances, we may use the results of freedom-to-operate studies to guide our early-stage research away from areas where we are likely to encounter obstacles in the form of third-party intellectual property. We strive to identify potential third-party intellectual property issues in the early stages of research in our programs in order to minimize the cost and disruption of resolving such issues.

Our breach of any license agreements or failure to obtain a license to proprietary rights that we may require to develop or commercialize our future drugs may have an adverse impact on us.

For more information, please see “Item 1A. Risk Factors—Risks Related to the Company’s Intellectual Property.”

Government Regulation

The FDA and comparable regulatory authorities in other countries impose requirements upon companies involved in the clinical development, manufacture, marketing and distribution of drugs, such as those we are developing. These requirements can, in some instances, be substantial and burdensome. These agencies and other federal, state and local entities regulate, among other things, the research and development, testing, manufacture, quality control, safety, effectiveness, labeling, storage, record keeping, approval, advertising and promotion, distribution, post-approval monitoring and reporting, sampling and export and import of pharmaceutical products. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources.

U.S. Government Regulation of Drug Products

In the United States, the FDA regulates drugs under the FDCA and its implementing regulations. Failure to comply with the applicable U.S. requirements at any time during the product development and approval process or after approval may subject an applicant to a variety of administrative or judicial sanctions. These sanctions could include, among other actions, the FDA's refusal to approve a pending NDA, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters or other notices of violation, product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on our business and results of operations.

The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- Completion of nonclinical laboratory tests, potentially animal studies and formulation studies in compliance with the FDA's GLP regulations;
- Submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- Approval by an IRB covering each clinical trial site before each trial may be initiated at that site;
- Performance of adequate and well-controlled human clinical trials in accordance with GCP regulations and other clinical trial-related requirements to establish the safety and efficacy of the proposed drug product for each indication;
- Submission to the FDA of an NDA seeking marketing approval;
- A determination by the FDA within 60 days of its receipt of an NDA that the NDA is sufficiently complete to permit a substantial review, in which case the NDA is filed;
- Satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with cGMP requirements and to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- Satisfactory completion of FDA audits of clinical trial sites that generated data in support of the NDA to assure compliance with GCP regulations and the integrity of the clinical data and/or FDA audits of the nonclinical studies submitted as part of the NDA; and
- FDA review and approval of the NDA, including consideration of the views of an FDA advisory committee, if one was involved, prior to any commercial marketing or sale of the drug in the United States.

Preclinical Studies and IND

Preclinical, or nonclinical studies generally include laboratory evaluation of product chemistry, toxicity and formulation, as well as in vitro and animal studies to assess the potential for adverse events and in some cases to establish a rationale for the investigational product's therapeutic use. The Consolidated Appropriations Act for 2023, signed into law on December 29, 2022, (P.L. 117-328) amended the FDCA to specify that nonclinical testing for drugs may, but is not required to, include in vivo animal testing. According to the amended language, a sponsor may fulfill nonclinical testing requirements by completing various in vitro assays (e.g., cell-based assays, organ chips, or microphysiological systems), in silico studies (i.e., computer modeling), other human or non-human biology-based tests (e.g., bioprinting), or in vivo animal tests. The conduct of nonclinical studies is subject to federal regulations and requirements, including GLP regulations.

An IND sponsor must submit the results of preclinical tests, together with manufacturing information, analytical data and any available clinical data or literature, among other things, to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational new drug to humans, and it must become effective before human clinical trials may begin. Some long-term nonclinical testing may continue even after the IND is submitted and clinical trials have been initiated. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA issues a notice expressly authorizing the proposed trial to proceed or raises concerns or questions related to one or more proposed clinical trials and places the clinical trial on a clinical hold. If the agency imposes a hold, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to initiate. Clinical holds also may be imposed by the FDA at any time before or during clinical trials due to safety concerns or non-compliance. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development.

Clinical Trials

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators (generally physicians not employed by or under the trial sponsor's control) in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial, as well as review and approval of the trial by an IRB for each participating site. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the trial procedures, subject selection and exclusion criteria, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. In addition, an IRB acting on behalf of each institution participating in the clinical trial must review and approve the trial plan, informed consent forms, and communications to trial subjects before the trial commences at that institution. An IRB considers, among other things, whether the risks to individuals participating in the trials are minimized and are reasonable in relation to anticipated benefits, and whether the planned human subject protections are adequate. The IRB must continue to oversee the clinical trial while it is being conducted and must operate in compliance with FDA regulations.

Sponsors of certain clinical trials generally must register such trials and disclose certain trial information within specific timeframes to the NIH for public dissemination on the ClinicalTrials.gov data registry. Information related to the investigational product, patient population, phase of investigation, trial sites and investigators and other aspects of the clinical trial is made public as part of the registration of the clinical trial. Sponsors are also obligated to disclose the results of their clinical trials after completion, but such disclosures may be delayed in some cases for up to two years after the date of completion of the trial. Failure to timely register a covered clinical study or to submit study results as provided for in the law can give rise to civil monetary penalties and also prevent the non-compliant party from receiving future grant funds from the federal government. The U.S. Department of Health and Human Services' Final Rule and NIH's complementary policy on ClinicalTrials.gov registration and reporting requirements became effective in 2017, and the government has brought enforcement actions against non-compliant clinical trial sponsors. Competitors may use the publicly available information about clinical trials to gain knowledge regarding the progress of development programs. Sponsors or distributors of investigational products for the diagnosis, monitoring, or treatment of one or more serious diseases or conditions must also have a publicly available policy on evaluating and responding to requests for expanded access requests.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

- *Phase I:* The drug candidate is initially administered to healthy human volunteers and tested for safety, dosage tolerance, structure-activity relationships, mechanism of action, absorption, metabolism, distribution, and excretion. In the case of some products for severe or life-threatening diseases, such as cancer, especially when the product may be too inherently toxic to administer ethically to healthy volunteers, the initial human testing is often conducted in patients with the target disease or condition. If possible, Phase I trials may also be used to gain an initial indication of product effectiveness.

- *Phase 2:* The drug candidate is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more extensive clinical trials.
- *Phase 3:* The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to evaluate the efficacy and safety of the product for its intended use, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product as well as an adequate basis for marketing approval. Typically, two adequate, well-controlled multicenter trials are required by the FDA for drug product approval. Under some limited circumstances, however, the FDA may approve an NDA based upon a single Phase 3 clinical trial plus confirmatory evidence from a post-market trial or, alternatively, a single large, robust, well-controlled multicenter trial without confirmatory evidence.
- *Post-approval Trials:* Sometimes referred to as “Phase 4” clinical trials, these trials may be conducted after initial marketing approval and are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the investigational drug, findings from animal or in vitro testing that suggest a significant risk for human subjects and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. It is possible that Phase 1, Phase 2 or Phase 3 trials may not be completed successfully within any specified period, or at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB’s requirements or if the drug has been associated with unexpected serious harm to patients. Sponsors may also choose to discontinue clinical trials as a result of risks to subjects, a lack of favorable results, or changing business priorities. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated checkpoints based on access to certain data from the trial.

Congress also recently amended the FDCA, as part of the Consolidated Appropriations Act for 2023, in order to require each sponsor of a Phase 3 clinical trial, or other “pivotal study” of a new drug to support marketing authorization, to design and submit a diversity action plan for such clinical trial. The action plan must include the sponsor’s diversity goals for enrollment, as well as a rationale for the goals and a description of how the sponsor will meet them. A sponsor must submit a diversity action plan to the FDA by the time the sponsor submits the relevant clinical trial protocol to the agency for review. The FDA may grant a waiver for some or all of the requirements for a diversity action plan. It is unknown at this time how the diversity action plan may affect Phase 3 trial planning and timing or what specific information FDA will expect in such plans, but if the FDA objects to a sponsor’s diversity action plan or otherwise requires significant changes to be made, it could delay initiation of the relevant clinical trial.

Concurrent with clinical trials, companies may perform additional nonclinical studies and develop additional information about a drug candidate’s chemistry and physical characteristics as well as finalize a process for its manufacturing in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final drug product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that a drug candidate does not undergo unacceptable deterioration over its proposed labeled shelf life.

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, preclinical studies and clinical trials are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. The NDA must contain proof of the product candidate's safety and substantial evidence of effectiveness for its proposed indication or indications in the form of relevant data available from pertinent preclinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. In particular, a marketing application must demonstrate that the manufacturing methods and quality controls used to produce the drug product are adequate to preserve the drug's identity, strength, quality, and purity. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of the product, or from a number of alternative sources, including studies initiated by investigators. FDA approval of an NDA must be obtained before the corresponding drug may be marketed in the United States.

Under PDUFA, each NDA submission is subject to a substantial application user fee, and the sponsor of an approved NDA is also subject to an annual program fee. The FDA adjusts the PDUFA user fees on an annual basis. The application user fee must be paid at the time of the first submission of the application, even if the application is being submitted on a rolling basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business.

The FDA reviews all NDAs submitted to determine if they are substantially complete before it accepts them for filing and may request additional information rather than accepting a submission for filing. The FDA must make a decision on accepting an NDA for filing within 60 days of receipt and must inform the sponsor by the 74th day after the FDA's receipt of the submission whether the application is sufficiently complete to permit substantive review. The FDA may refuse to file any submission that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the marketing application must be resubmitted with the additional information requested by the agency. The resubmitted application is also subject to review before the FDA accepts it for filing.

Once an NDA is accepted for filing, the FDA's goal is to review the application within 10 months after it accepts the application for filing, or, if the application meets the criteria for "priority review," six months after the FDA accepts the application for filing. The review process is often significantly extended by FDA requests for additional information or clarification after the NDA has been accepted for filing. The review process may be extended by the FDA for three additional months to consider new information or in the case of a clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

During the review process, the FDA reviews the NDA to determine, among other things, whether the product is safe and effective and whether the facility in which it is manufactured, processed, packed, or held meets standards designed to assure the product's continued strength, quality, and purity. The FDA may refer any NDA, including applications for novel drug candidates which present difficult questions of safety or efficacy to an advisory committee to provide clinical insight on application review questions. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendation of an advisory committee, but it considers such recommendations carefully when making final decisions on approval.

Before approving an NDA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent manufacture of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies as part of the review process and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

Under the PREA, amendments to the FDCA, an NDA or supplement to an NDA must contain data that are adequate to assess the safety and efficacy of the product candidate for the claimed indications in all relevant pediatric populations and to support dosing and administration for each pediatric population for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. The PREA requires a sponsor that is planning to submit a marketing application for a product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration to submit an initial Pediatric Study Plan, or PSP, within sixty days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase 3 or Phase 2/3 clinical trial. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including trial objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from pre-clinical studies, early-phase clinical trials or other clinical development programs.

The testing and approval process requires substantial time, effort and financial resources, and each may take several years to complete. The FDA may not grant approval on a timely basis, or at all, and we may encounter difficulties or unanticipated costs in our efforts to secure necessary governmental approvals, which could delay or preclude us from marketing its products. After the FDA evaluates an NDA and conducts inspections of the manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a CRL. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A CRL indicates that the review cycle of the application is complete and the application will not be approved in its present form. A CRL generally outlines the deficiencies in the submission and may require substantial additional testing, information or clarification for FDA to reconsider the application. The FDA may delay or refuse approval of an NDA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product. If a CRL is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application. If and when the deficiencies have been addressed to the FDA's satisfaction in a resubmission of the marketing application, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in response to an issued CRL in either two or six months depending on the type of information included. Even if such data and information are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval.

If regulatory approval of a product is granted, such approval is limited to the conditions of use (e.g., patient population, indication) described in the application and may entail further limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the NDA with a REMS plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA determines the requirement for a REMS, as well as the specific REMS provisions, on a case-by-case basis. If the FDA concludes a REMS plan is needed, the sponsor of the NDA must submit a proposed REMS to obtain approval for the product. The FDA also may condition approval on, among other things, changes to proposed labeling (e.g., adding contraindications, warnings or precautions) or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization and may limit further marketing of the product based on the results of these post-marketing studies. Some types of changes to an approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and separate FDA review and approval. In addition, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

Fast Track, Priority Review, and Breakthrough Therapy Designations

A sponsor may seek approval of its product candidate under programs designed to accelerate FDA's review and approval of new drugs that meet certain criteria. Specifically, new drugs are eligible for fast track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast track designation provides increased opportunities for sponsor interactions with the FDA during preclinical and clinical development, in addition to the potential for rolling review once a marketing application is filed, meaning that the FDA may consider for review sections of the NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept the sections and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the application. A fast track designated product candidate may also qualify for accelerated approval (described below) or priority review, under which the FDA sets the target date for FDA action on the NDA or biologics license application at six months after the FDA accepts the application for filing.

Priority review is granted when there is evidence that the proposed product would be a significant improvement in the safety or effectiveness of the treatment, diagnosis, or prevention of a serious condition. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting drug reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, or evidence of safety and effectiveness in a new subpopulation. If criteria are not met for priority review, the application is subject to the standard FDA review period of 10 months after FDA accepts the application for filing.

In addition, a sponsor may seek FDA designation of its product candidate as a breakthrough therapy if the product candidate is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the therapy may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Breakthrough therapy designation provides all the features of fast track designation in addition to intensive guidance on an efficient development program beginning as early as Phase 1, and FDA organizational commitment to expedited development, including involvement of senior managers and experienced review and regulatory staff in a proactive, collaborative, cross-disciplinary review, where appropriate. A drug designated as breakthrough therapy is also eligible for accelerated approval if the relevant criteria are met.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. Fast track, priority review and breakthrough therapy designations do not change the scientific or medical standards for approval or the quality of evidence necessary to support approval but may expedite the development or approval process.

Accelerated Approval

In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval from the FDA and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such a drug or biologic when it has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on IMM, and that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform post-marketing clinical trials to verify and describe the predicted effect on IMM or other clinical endpoint, and the product may be subject to expedited withdrawal procedures. Drugs granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a drug or biologic, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints, but has indicated that such endpoints generally may support accelerated approval when the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate long-term clinical benefit of a drug.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a drug, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly. For example, accelerated approval has been used extensively in the development and approval of drugs for treatment of a variety of cancers in which the goal of therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large clinical trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is usually contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the product candidate's clinical benefit. As a result, a product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or to confirm the predicted clinical benefit of the product during post-marketing studies, would allow the FDA to withdraw approval of the product. As part of the Consolidated Appropriations Act for 2023, Congress provided FDA additional statutory authority to mitigate potential risks to patients from continued marketing of ineffective drugs or biologics previously granted accelerated approval. Under the act's amendments to the FDCA, FDA may require the sponsor of a product granted accelerated approval to have a confirmatory trial underway prior to approval. The sponsor must also submit progress reports on a confirmatory trial every six months until the trial is complete, and such reports are published on FDA's website. The amendments also give FDA the option of using expedited procedures to withdraw product approval if the sponsor's confirmatory trial fails to verify the claimed clinical benefits of the product.

All promotional materials for product candidates being considered and approved under the accelerated approval program are subject to prior review by the FDA.

Patent Term Restoration

Depending upon the timing, duration and specifics of FDA approval of our product candidates, some of our United States patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act, informally known as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product candidate's approval date. The patent term restoration period is generally one half of the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of the NDA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved product candidate is eligible for the extension and the application for extension must be made prior to expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we intend to apply for restorations of patent term for some of our currently owned or licensed patents to add patent life beyond their current expiration date, depending on the expected length of clinical trials and other factors involved in the submission of the relevant NDA.

Pediatric Exclusivity

Pediatric exclusivity is a type of non-patent marketing exclusivity available in the United States and, if granted, it provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity or listed patents. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application. The issuance of a written request does not require the sponsor to undertake the described studies.

In 1984, with passage of the Hatch-Waxman Act, which established an abbreviated regulatory scheme authorizing the FDA to approve generic drugs based on an innovator or “reference” product, Congress also enacted Section 505(b)(2) of the FDCA, which provides a hybrid pathway combining features of a traditional NDA and a generic drug application. To obtain approval of a generic drug, an applicant must submit an ANDA to the agency. In support of such applications, a generic manufacturer may rely on the preclinical and clinical testing previously conducted for a drug product previously approved under an NDA, known as the RLD.

Specifically, in order for an ANDA to be approved, the FDA must find that the generic version is identical to the RLD with respect to the active ingredients, the route of administration, the dosage form, and the strength of the drug. At the same time, the FDA must also determine that the generic drug is “bioequivalent” to the innovator drug. Under the statute, a generic drug is bioequivalent to an RLD if “the rate and extent of absorption of the drug do not show a significant difference from the rate and extent of absorption of the listed drug.”

Upon approval of an ANDA, the FDA indicates whether the generic product is “therapeutically equivalent” to the RLD in its publication *Approved Drug Products with Therapeutic Equivalence Evaluations*, also referred to as the Orange Book. Clinicians and pharmacists consider a therapeutic equivalent generic drug to be fully substitutable for the RLD. In addition, by operation of certain state laws and numerous health insurance programs, the FDA’s designation of therapeutic equivalence often results in substitution of the generic drug without the knowledge or consent of either the prescribing clinicians or patient.

In contrast, Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. Section 505(b)(2) NDAs may provide an alternate path to FDA approval for new or improved formulations or new uses of previously approved products; for example, an applicant may be seeking approval to market a previously approved drug for new indications or for a new patient population that would require new clinical data to demonstrate safety or effectiveness. A Section 505(b)(2) applicant may eliminate the need to conduct certain preclinical or clinical studies, if it can establish that reliance on studies conducted for a previously-approved product is scientifically appropriate. Unlike the ANDA pathway used by developers of bioequivalent versions of innovator drugs, which does not allow applicants to submit new clinical data other than bioavailability or bioequivalence data, the 505(b)(2) regulatory pathway does not preclude the possibility that a follow-on applicant would need to conduct additional clinical trials or nonclinical studies. The FDA may then approve the new product for all or some of the label indications for which the RLD has been approved, or for any new indication sought by the Section 505(b)(2) applicant, as applicable.

In addition, under the Hatch-Waxman Amendments, the FDA may not approve an ANDA or 505(b)(2) NDA until any applicable period of non-patent exclusivity for the RLD has expired. These market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing an NCE. For the purposes of this provision, an NCE, is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such NCE exclusivity has been granted, an ANDA or 505(b)(2) NDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification (described below), in which case the applicant may submit its application four years following the original product approval.

The FDCA also provides for a period of three years of exclusivity for an NDA, 505(b)(2) NDA or supplement thereto if one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant are deemed by the FDA to be essential to the approval of the application. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication. The three-year exclusivity covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving follow-on applications for drugs containing the original active agent. Five-year and three-year exclusivity also will not delay the submission or approval of a traditional NDA filed under Section 505(b)(1) of the FDCA. However, an applicant submitting a traditional NDA would be required to either conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Hatch-Waxman Patent Certification and the 30-Month Stay

Upon approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant's product or an approved method of using the product. Each of the patents listed by the NDA sponsor is published in the Orange Book. When an ANDA applicant files its application with the FDA, the applicant is required to certify to the FDA concerning any patents listed for the reference product in the Orange Book, except for patents covering methods of use for which the ANDA applicant is not seeking approval. To the extent that the Section 505(b)(2) NDA applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would.

Specifically, the applicant must certify with respect to each patent that:

- the required patent information has not been filed by the original applicant;
- the listed patent has expired;
- the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or
- the listed patent is invalid, unenforceable or will not be infringed by the manufacture, use or sale of the new product.

If a Paragraph I or II certification is filed, the FDA may make approval of the application effective immediately upon completion of its review. If a Paragraph III certification is filed, the approval may be made effective on the patent expiration date specified in the application, although a tentative approval may be issued before that time. If an application contains a Paragraph IV certification, a series of events will be triggered, the outcome of which will determine the effective date of approval of the ANDA or 505(b)(2) application.

If the follow-on applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the follow-on application in question has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days after the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA or 505(b)(2) NDA until the earlier of 30 months after the receipt of the Paragraph IV notice, expiration of the patent, or a decision in the infringement case that is favorable to the ANDA or 505(b)(2) applicant. Alternatively, if the listed patent holder does not file a patent infringement lawsuit within the required 45-day period, the follow-on applicant's ANDA or 505(b)(2) NDA will not be subject to the 30-month stay.

Post-Approval Requirements

Following approval of a new product, the manufacturer and the approved product are subject to pervasive and continuing regulation by the FDA, including, among other things, monitoring and recordkeeping activities, reporting of adverse experiences with the product, product sampling and distribution restrictions, complying with promotion and advertising requirements, which include restrictions on promoting drugs for unapproved uses or patient populations (i.e., "off-label use") and limitations on industry-sponsored scientific and educational activities. The manufacturer and its products are also subject to similar post-approval requirements by regulatory authorities comparable to FDA in jurisdictions outside of the United States where the products are approved. Although physicians may prescribe legally available products for off-label uses, manufacturers may not market or promote such uses. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability. If there are any modifications to the product, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA or a supplement to an NDA, which may require the applicant to develop additional data or conduct additional nonclinical studies and clinical trials. The FDA may also place other conditions on approvals including the requirement for a REMS to assure the safe use of the product. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMPs. The cGMP regulations include requirements relating to organization of personnel, buildings and facilities, equipment, control of components and drug product containers and closures, production and process controls, packaging and labeling controls, holding and distribution, laboratory controls, records and reports and returned or salvaged products. The manufacturing facilities for our product candidates must meet applicable cGMP requirements to the FDA's or comparable foreign regulatory authorities' satisfaction before any product is approved and our commercial products can be manufactured. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. These manufacturers must comply with cGMP regulations that require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and certain state agencies and are subject to periodic prescheduled or unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. Future inspections by the FDA and other regulatory agencies may identify compliance issues at the facilities of our contract manufacturing organizations that may disrupt production or distribution or require substantial resources to correct. In addition, the discovery of conditions that violate these rules, including failure to conform to cGMPs, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, manufacturer or holder of an approved NDA, including voluntary recall and regulatory sanctions as described below.

Once an approval or clearance of a drug is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in mandatory revisions to the approved labeling to add new safety information; imposition of post-market or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program.

Other potential consequences include, among other things:

- Restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- Fines, warning letters or other enforcement-related letters, or clinical holds on post-approval clinical trials;
- Refusal of the FDA to approve pending marketing applications or supplements to approved marketing authorizations, or suspension or revocation of product approvals;
- Product seizure or detention, or refusal to permit the import or export of products;
- Injunctions or the imposition of civil or criminal penalties;
- Consent decrees, corporate integrity agreements, debarment, or exclusion from federal health care programs; and/or
- Mandated modification of promotional materials and labeling and the issuance of corrective information.

In addition, the distribution of prescription pharmaceutical products is subject to the PDMA, which regulates the distribution of drugs and drug samples at the federal level and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution. Most recently, the DSCSA was enacted with the aim of building an electronic system to identify and trace certain prescription drugs distributed in the United States. The DSCSA mandates phased-in and resource-intensive obligations for pharmaceutical manufacturers, wholesale distributors, and dispensers over a 10-year period, which culminated in November 2023. Most recently, the FDA announced a one-year stabilization period to November 2024, giving entities subject to the DSCSA additional time to finalize interoperable tracking systems and to ensure supply chain continuity. From time to time, new legislation and regulations may be implemented that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. It is impossible to predict whether further legislative or regulatory changes will be enacted, whether FDA regulations, guidance or interpretations will be changed or what the impact of such changes, if any, may be.

Other U.S. Health Care Laws and Regulations

If our product candidates are approved in the United States, we will have to comply with various U.S. federal and state laws, rules and regulations pertaining to health care fraud and abuse, including anti-kickback laws and physician self-referral laws, rules and regulations. Violations of the fraud and abuse laws are punishable by criminal and civil sanctions, including, in some instances, exclusion from participation in federal and state health care programs, including Medicare and Medicaid. These laws include:

- The federal AKS prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or paying remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal health care program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the AKS or specific intent to violate it to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the AKS constitutes a false or fraudulent claim for purposes of the FCA or federal civil money penalties statute;
- The federal civil and criminal false claims laws and civil monetary penalty laws, including the federal False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, false or fraudulent claims for payment to, or approval by Medicare, Medicaid, or other federal healthcare programs, knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim or an obligation to pay or transmit money to the federal government, or knowingly concealing or knowingly and improperly avoiding or decreasing or concealing an obligation to pay money to the federal government. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payers if they are deemed to “cause” the submission of false or fraudulent claims. The FCA also permits a private individual acting as a “whistleblower” to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery;
- HIPAA imposes criminal and civil liability for executing a scheme to defraud any health care benefit program or making false statements relating to health care matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- The federal transparency requirements under the Physician Payments Sunshine Act require manufacturers of FDA-approved drugs, devices, biologics and medical supplies covered by Medicare or Medicaid to report, on an annual basis, to the CMS information related to payments and other transfers of value to physicians, certain advanced non-physician health care practitioners, and teaching hospitals or to entities or individuals at the request of, or designated on behalf of, such physicians, non-physician health care practitioners, and teaching hospitals as well as certain ownership and investment interests held by physicians and their immediate family members; and

- Analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving health care items or services reimbursed by nongovernmental third-party payors, including private insurers.

The majority of states also have statutes or regulations similar to the aforementioned federal laws, some of which are broader in scope and apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines, or the relevant compliance guidance promulgated by the federal government, in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures to the extent that those laws impose requirements that are more stringent than the Physician Payments Sunshine Act. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Due to the breadth of these laws and the narrowness of their exceptions and safe harbors, it is possible that business activities can be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry.

Ensuring that business arrangements with third parties comply with applicable healthcare laws and regulations is costly and time consuming. If business operations are found to be in violation of any of the laws described above or any other applicable governmental regulations a pharmaceutical manufacturer may be subject to penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, exclusion from governmental funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and curtailment or restructuring of operations, any of which could adversely affect a pharmaceutical manufacturer's ability to operate its business and the results of its operations.

Pharmaceutical Coverage, Pricing, and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of products approved by the FDA and other government authorities. Sales of our products, when and if approved for marketing in the United States, will depend, in part, on the extent to which our products will be covered by third-party payors, such as federal, state, and foreign government healthcare programs, commercial insurance and managed healthcare organizations. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of the approved products for a particular indication. In addition, these third-party payors are increasingly reducing reimbursements for medical products, drugs and services. Furthermore, the U.S. government, state legislatures and foreign governments have continued implementing cost containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Adoption of price controls and cost containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results. Limited third-party reimbursement for our product candidates or a decision by a third-party payor not to cover our product candidates could reduce physician usage of our products once approved and have a material adverse effect on our sales, results of operations and financial condition.

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product and therapeutic candidates, restrict or regulate post-approval activities, and affect the ability to profitably sell product and therapeutic candidates that obtain marketing approval. The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product and therapeutic candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we otherwise may have obtained and we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations.

As previously mentioned, the primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medical products and services, implementing reductions in Medicare and other healthcare funding and applying new payment methodologies. In recent years, the U.S. Congress has considered reductions in Medicare reimbursement levels for medicines and biologics administered by physicians. CMS, the agency that administers the Medicare and Medicaid programs, also has authority to revise reimbursement rates and to implement coverage restrictions for most drugs and biologics. Cost reduction initiatives and changes in coverage implemented through legislation or regulation could decrease utilization of and reimbursement for any approved products we may market in the future. While Medicare regulations apply only to pharmaceutical benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from federal legislation or regulation may result in a similar reduction in payments from private payors.

In recent years, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. Notably, the CREATES Act, which became effective on December 20, 2019, addresses concerns articulated by both the FDA and others in the industry that some brand manufacturers have improperly restricted the distribution of their products, including by invoking the existence of a REMS for certain products, to deny generic and biosimilar product developers access to samples of brand products. Because generic and biosimilar product developers need samples to conduct certain comparative testing required by the FDA, some have attributed the inability to timely obtain samples as a cause of delay in the entry of generic and biosimilar products. To remedy this concern, the CREATES Act establishes a private cause of action that permits a generic or biosimilar product developer to sue the brand manufacturer to compel it to furnish the necessary samples on "commercially reasonable, market-based terms." Whether and how generic and biosimilar product developments will use this new pathway, as well as the likely outcome of any legal challenges to provisions of the CREATES Act, remain highly uncertain and its potential effects on our future commercial products are unknown.

More recently, in August 2022, President Biden signed into the law the IRA. Among other things, the IRA has multiple provisions that may impact the prices of drug products that are both sold into the Medicare program and throughout the United States. Starting in 2023, a manufacturer of a drug or biological product covered by Medicare Parts B or D must pay a rebate to the federal government if the drug product's price increases faster than the rate of inflation. This calculation is made on a drug product by drug product basis and the amount of the rebate owed to the federal government is directly dependent on the volume of a drug product that is paid for by Medicare Parts B or D. Additionally, starting in payment year 2026, CMS will negotiate drug prices annually for a select number of single-source Part D drugs without generic or biosimilar competition. CMS will also negotiate drug prices for a select number of Part B drugs starting for payment year 2028. If a drug product is selected by CMS for negotiation, it is expected that the revenue generated from such drug will decrease. CMS has begun to implement these new authorities and entered into the first set of agreements with pharmaceutical manufacturers to conduct price negotiations in October 2023. However, the IRA's impact on the pharmaceutical industry in the United States remains uncertain, in part because multiple large pharmaceutical companies and other stakeholders (e.g., the U.S. Chamber of Commerce) have initiated federal lawsuits against CMS arguing the program is unconstitutional for a variety of reasons, among other complaints. Those lawsuits are currently ongoing.

In addition to the IRA's drug price negotiation provisions, President Biden's Executive Order 14087, issued in October 2022, called for the CMS innovation center to prepare and submit a report to the White House on potential payment and delivery modes that would complement to IRA, lower drug costs, and promote access to innovative drugs. In February 2023, CMS published its report which described three potential models focusing on affordability, accessibility and feasibility of implementation for further testing by the CMS Innovation Center. As of February 2024, the CMS Innovation Center continues to test the proposed models and has started to roll out plans for access model testing of certain product types (e.g., cell and gene therapies) by states and manufacturers.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In December 2020, the U.S. Supreme Court held unanimously that federal law does not preempt the states' ability to regulate PBMs and other members of the healthcare and pharmaceutical supply chain, an important decision that may lead to further and more aggressive efforts by states in this area. The FTC in mid-2022 also launched sweeping investigations into the practices of the PBM industry that could lead to additional federal and state legislative or regulatory proposals targeting such entities' operations, pharmacy networks, or financial arrangements. Significant efforts to change the PBM industry as it currently exists in the United States may affect the entire pharmaceutical supply chain and the business of other stakeholders, including pharmaceutical developers like us. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. These measures could reduce the ultimate demand for our products, once approved, or put pressure on our product pricing.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. We expect that additional federal, state, and foreign healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in limited coverage and reimbursement and reduced demand for our products, once approved, or additional pricing pressures.

Regulation Outside the United States

For countries outside of the United States, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, clinical trials must be conducted in accordance with GCP and the other applicable regulatory requirements. To the extent that any of our product candidates, once approved, are sold in a foreign country, we and our collaborators will be subject to applicable foreign laws and regulations, which may include, for instance, post-marketing requirements, including safety surveillance, anti-fraud and abuse laws and implementation of corporate compliance programs and reporting of payments or other transfers of value to healthcare professionals. If we or our collaborators fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension of clinical trials, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions, and criminal prosecution.

For example, to market our future products in the EEA (which is comprised of the 28 Member States of the European Union plus Norway, Iceland and Liechtenstein) and many other foreign jurisdictions, we must obtain separate regulatory approvals. More concretely, in the EEA, medicinal products can only be commercialized after obtaining an MA. There are two types of MAs:

- The Community MA, which is issued by the European Commission through the Centralized Procedure, is based on the opinion of the Committee for Medicinal Products for Human Use of the EMA, and which is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of products, including medicines containing novel active substances to treat neurodegenerative disorders. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA (other than those intended for the treatment of HIV/AIDS, cancer, diabetes, neurodegenerative diseases, auto-immune and other immune dysfunctions, or viral diseases, which must be authorized through the Centralized Procedure), or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU; and

- National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in another Member State through the Mutual Recognition Procedure. If the product has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure.

Under the procedures described above, before granting the MA the EMA or the competent authorities of the Member States of the EEA assess the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

In April 2023 the European Commission issued a proposal that will revise and replace the existing general pharmaceutical legislation. If adopted and implemented as currently proposed, these revisions will significantly change several aspects of drug development and approval in the European Union.

Data and Marketing Exclusivity

In the EEA, new products authorized for marketing, or reference products, qualify for eight years of data exclusivity and an additional two years of market exclusivity upon marketing authorization. The data exclusivity period prevents generic applicants from relying on the nonclinical and clinical trial data contained in the dossier of the reference product when applying for a generic marketing authorization in the European Union during a period of eight years from the date on which the reference product was first authorized in the European Union. The market exclusivity period prevents a successful generic applicant from commercializing its product in the European Union until 10 years have elapsed from the initial authorization of the reference product in the European Union. The 10-year market exclusivity period can be extended to a maximum of eleven years if, during the first eight years of those 10 years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies.

Our People

Overview

As of December 31, 2023, we had eight employees, all of whom we classify as full-time employees, up from four employees as of December 31, 2022. We consider the relationship with our employees to be good. We also engage outside consultants and contractors with unique expertise and skills for specific purposes.

Our success depends upon our ability to attract and retain highly qualified management and technical employees. Talent management is critical to our ability to execute our long-term growth strategy, including providing career growth, on-the-job learning opportunities and competitive compensation. We are committed to an inclusive culture which values equality, opportunity and respect. We are focused on the engagement and empowerment of our employees through the demonstration of these foundational values.

None of our employees are represented by labor unions or covered by collective bargaining agreements.

Company Culture; Diversity and Inclusion

We believe that an inclusive culture is required to understand and develop products that benefit all patients. By embracing differences, we aim to foster an environment of respect and trust in an effort to facilitate creativity, spark passion and help us achieve better outcomes for all those who work at and with CervoMed. We are committed to creating and maintaining a workplace free from discrimination or harassment, including on the basis of any class protected by applicable law, and our recruitment, hiring, development, training, compensation, and advancement practices are based on qualifications, performance, skills, and experience without regard to gender, race, ethnicity or other demographics.

Our management team and employees are expected to exhibit and promote honest, ethical, and respectful conduct in the workplace, including adhering to the standards for appropriate behavior set forth in our code of conduct. An “open door” policy is maintained at all levels of the organization and any form of retaliation against an employee reporting or registering complaints in the event of any violation of our policies is strictly prohibited.

Compensation and Benefits

We operate in a highly competitive environment for human capital, particularly as we seek to attract and retain talent with relevant experience in the biotechnology and pharmaceutical sectors. Therefore, we strive to provide a total rewards package to our employees that is competitive with our peer companies and helps meet the needs of our employees. This package currently includes competitive salaries, a cash bonus plan, a comprehensive healthcare benefits package (including a 90% employer contribution to family medical coverage), unlimited paid time off, a company-sponsored 401(k) savings plan, short-term and long-term disability, and other benefits, as well as remote working and flexible work schedules. We also offer every full-time employee the benefit of equity ownership in CervoMed through stock option grants with vesting conditions designed to facilitate retention through the opportunity to benefit financially from our growth and profitability, as they generally vest over a three- or four-year period. We believe these grants also help promote alignment between our employees and our stockholders.

Employee Engagement, Safety and Wellness

At CervoMed, we believe that health matters to everyone and that the success of our business is fundamentally connected to the physical and mental well-being of our people. Accordingly, the safety health, and wellness of our employees is one of our top priorities. We are committed to developing and fostering a work environment that is safe, professional, and promotes teamwork, diversity, and trust in order to afford all of our employees the opportunity to contribute to the best of their abilities. In addition to the benefits package described above, in recent years, we have taken certain measures and responded to changes in our operational needs, including actions designed to further promote a safe work environment for our employees, such as investing in technology solutions to support increased work-from-home capabilities and moving to an unlimited paid leave policy.

Development and Training

Our employees are encouraged to attend scientific, clinical, technological, and other relevant meetings and conferences and we strive to provide employees access to a broad set of internal resources intended to help them be successful, including a variety of training and educational materials. We have also implemented a comprehensive employee evaluation program tied to the achievement of individual, team, and company goals to help further support, retain, and develop our people and further promote alignment of interests between our employees and our stockholders.

Our Directors

The table below sets forth, as of March 28, 2024, certain information concerning our current directors.

Name	Age	Director Since
Joshua S. Boger, Ph.D. (Chair)	72	2024
John Alam, M.D.	62	2023
Robert J. Cobuzzi, Jr., Ph.D.	58	2023
Sylvie Grégoire, PharmD.	62	2023
Jane Hollingsworth, J.D.	65	2020
Jeff Poulton	56	2023
Marwan Sabbagh, M.D.	58	2023
Frank Zavrl	58	2023

Our Executive Officers

The table below sets forth, as of March 28, 2024, certain information concerning our current executive officers.

Name	Age	Position
John Alam, M.D.	62	President and Chief Executive Officer (Principal Executive Officer)
William Tanner, Ph.D.	65	Chief Financial Officer
Robert J. Cobuzzi, Jr., Ph.D.	59	Chief Operating Officer
Kelly Blackburn, M.H.A.	60	Senior Vice President, Clinical Development
William Elder	41	General Counsel and Corporate Secretary (Acting Principal Financial Officer)

Our Scientific Advisory Board

We have assembled a highly qualified scientific advisory board comprised of thought leaders in the fields of cell biology, intracellular signal transduction, neurotherapeutics, and translational neuroscience.

Name	Affiliated Entity
Ole Isacson, Dr.Med.Sci.	Professor of Neurology at Harvard Medical School, Founding Director of the Neuroregeneration Research Institute at McLean Hospital
Lewis Cantley, Ph.D.	Professor of Cell Biology at Harvard Medical School. Prior to this appointment, he was the Margaret and Herman Sokol Professor and Meyer Director of the Sandra and Edward Meyer Cancer Center at Weill Cornell Medical College/Ronald P. Stanton Clinical Cancer Program at New York Presbyterian Hospital (2012-22)
Jeffrey Cummings, M.D., Sc.D.	Joy Chambers-Grundy Professor of Brain Science and the Director of the Chambers-Grundy Center for Transformative Neuroscience at the UNLV School of Integrated Health Sciences. Prior to UNLV, Dr. Cummings served as founding director of the Cleveland Clinic Lou Ruvo Center for Brain Health in Las Vegas, and as director of the Mary S. Easton Center for Alzheimer's Disease Research, and director of the Deane F. Johnson Center for Neurotherapeutics, both at UCLA
Heidi McBride, Ph.D.	Canada Research Chair in Mitochondrial Cell Biology, Professor in the Department of Neurology and Neurosurgery at McGill University

Corporate Information

Our History

We were originally incorporated under the laws of the State of Nevada on January 10, 1995 and reincorporated under the laws of the State of Delaware on June 18, 2015. On August 16, 2023, we completed the merger of Merger Sub with and into EIP, which was treated as a "reverse recapitalization" under U.S. GAAP pursuant to which EIP's historical results of operations replaced the Company's for all periods prior to the merger. Immediately following the closing of the merger, we changed our name from "Diffusion Pharmaceuticals Inc." to "CervoMed Inc."

Where to Find Us

Our principal corporate office is located at 20 Park Plaza, Suite 424, Boston, Massachusetts 02116, and our telephone number is (617) 744-4400. Our website, www.cervomed.com, including the Investor Relations section, ir.cervomed.com, contains a significant amount of information about the Company.

However, the information included on our website is not incorporated by reference into, and should not be considered part of, this Annual Report or any other filings we make with the SEC.

Other Available Information

We make available on or through our website certain reports that we file with or furnish to the SEC in accordance with Exchange Act. These include our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, and our Current Reports on Form 8-K, as well as any amendments to those reports, filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. We make this information available free of charge as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC. The SEC also maintains a website, www.sec.gov, that contains reports, proxy and information statements, and other information regarding the Company and other issuers that file electronically with the SEC. We also make available, free of charge and through our website, the charters of the committees of the Board, our Corporate Governance Guidelines, and our Code of Business Conduct and Ethics.

ITEM 1A. RISK FACTORS

Investing in our securities involves a high degree of risk. Set forth below are certain material risks and uncertainties known to us that could adversely affect our business, financial condition, or results of operations or could cause our actual results to differ materially from our expectations expressed in our filings with the SEC and other public statements. The occurrence of the events contemplated by one or more of the factors we describe below could cause the market price of our securities to decline, resulting in the loss of all or part of any investment in our common stock. Furthermore, other risks that are currently unknown to us or that we currently believe to be immaterial may also, nevertheless, adversely affect our business, financial condition, or results of operations in a way that is material.

You should carefully consider the risk factors set forth below as may updated by our subsequent filings under the Exchange Act together with all the other information in this Annual Report, including our consolidated financial statements and the related notes included in Part II, Item 8 – Financial Statements and Supplementary Data of this Annual Report and the information set forth in Part II, Item 7A -- Management's Discussion and Analysis of Financial Condition and Results of Operations, as well as in our other filings with the SEC, before making any investment decisions. Furthermore, the risks and uncertainties described below and in the other information mentioned above are not the only ones the Company faces. Additional risks and uncertainties not presently known to the Company or that we currently believe to be immaterial could, nevertheless, adversely affect the Company's business, operating results and financial condition, as well as adversely affect the value of an investment in the Company's securities, and the occurrence of any of these risks might cause you to lose all or part of your investment.

Summary of Risk Factors

- The Company is a clinical stage biopharmaceutical company and has incurred significant losses since its inception. The Company expects its net losses to continue for the foreseeable future. The Company is not currently profitable and may never achieve or sustain profitability. The Company is unable to predict the extent of future losses or when it might become profitable, if ever.
- The Company will require additional capital to fund its operations. If the Company fails to obtain necessary financing on acceptable terms, or at all, it may not be able to complete the development and commercialization of neflamapimod.
- The Company currently does not have, and may never have, any products that generate significant revenues.
- The Company is heavily dependent on the success of its lead product candidate, neflamapimod, which is still under clinical development. If neflamapimod does not receive regulatory approval or is not successfully commercialized, the Company's business will be materially harmed.
- The development and commercialization of drug products is subject to extensive regulation, and the regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time-consuming, and inherently unpredictable. There is no guarantee that the Company's planned clinical trials for neflamapimod to treat patients with DLB, or in any other indications that the Company may pursue, will be successful. If the Company is ultimately unable to obtain regulatory approval for neflamapimod on a timely basis, or at all, its business will be substantially harmed.
- Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. The Company may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of neflamapimod or any other product candidates the Company may develop or acquire.
- The Company has concentrated its research and development efforts on the treatment of DLB, a disease that has seen limited success in drug development. The ability to successfully develop drugs for DLB and other age-related neurologic disorders is extremely difficult and is subject to a number of unique challenges. In addition, its rationale for neflamapimod in the treatment of DLB is based on a scientific understanding of the disease that may be wrong.
- Enrollment and retention of participants in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside the Company's control.
- Results of preclinical studies and early clinical trials may not be indicative of results obtained in later trials. In addition, preliminary, topline and interim data from the Company's clinical trials that the Company may announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.
- If the Company does not adequately protect its proprietary rights, the Company may not be able to compete effectively.
- The Company has no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for its future viability.
- Even if neflamapimod or any other product candidate the Company develops receives marketing approval, it may fail to achieve the level of acceptance necessary for commercial success.
- The Company's future success depends in large part on the Company's ability to retain its key employees, as well as its ability to attract, train and motivate additional qualified personnel. The Company may also encounter difficulties in managing its growth, which could disrupt its operations.
- The Company has identified material weaknesses in its internal control over financial reporting which, if not corrected, could affect the reliability of the Company's financial statements and have other adverse consequences. The Company may identify additional material weaknesses in its internal controls over financial reporting which it may not be able to remedy in a timely manner. If the Company fails to maintain proper and effective internal controls, its ability to produce accurate financial statements on a timely basis could be impaired.

Risks Related to the Company's Limited Operating History, Financial Condition and Need for Additional Capital

The Company is a clinical stage biopharmaceutical company and has incurred significant losses since its inception. The Company expects its net losses to continue for the foreseeable future. The Company is not currently profitable and may never achieve or sustain profitability. The Company is unable to predict the extent of future losses or when it might become profitable, if ever.

Investment in pharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval, and become commercially viable. The Company has incurred net losses since its inception, and as of December 31, 2023, it had an accumulated deficit of approximately \$54.4 million. The Company expects to incur net losses for the foreseeable future as it incurs significant clinical development costs related to the advancement of neflamapimod. The Company has not commercialized any products and has never generated revenue from neflamapimod or any other product. In order to obtain revenues from any product candidate, the Company must succeed, either alone or in collaboration with others, in developing, obtaining regulatory approval for, and manufacturing and marketing drugs with significant market potential. The Company may never succeed in these activities and may never generate revenues that are significant enough to achieve profitability.

The Company expects to incur significant additional operating losses for at least the next several years as it advances neflamapimod through clinical development, conducts clinical trials, seeks regulatory approval and commercializes neflamapimod, if it is ultimately approved for marketing. The costs of advancing product candidates into each successive clinical phase of the clinical development process tend to increase substantially. Therefore, the total costs to advance neflamapimod to marketing approval in even a single jurisdiction will be substantial. Due to the numerous risks and uncertainties associated with pharmaceutical product development, the Company is unable to accurately predict the timing or amount of increased expenses, or when or if it will be able to begin generating revenue from the commercialization of neflamapimod, let alone achieve or maintain profitability.

The amount of the Company's future net losses will depend, in part, on the rate of future growth of its expenses, if and when neflamapimod is approved for marketing in various jurisdictions and its ability to generate revenues from any drug candidate that may ultimately be approved. If the Company is unable to develop and commercialize one or more product candidates, either alone or through collaborations, or if revenues from any product that receives marketing approval are insufficient, it will not achieve profitability. Even if the Company does achieve profitability, it may not be able to sustain it, which could materially and adversely affect its business.

The Company will require additional capital to fund its operations. If the Company fails to obtain necessary financing on acceptable terms, or at all, it may not be able to complete the development and commercialization of neflamapimod.

The Company expects to spend substantial amounts to complete the development of, seek regulatory approvals for, and commercialize neflamapimod, if it is ultimately approved for marketing. These expenditures will include costs related to the RewinD-LB Trial and costs associated with its license agreement with Vertex, under which the Company is obligated to make certain payments in connection with the achievement of specified events.

Until such time, if ever, that the Company can generate sufficient product revenue and achieve profitability, it expects to seek to finance future cash needs through equity or debt financings and/or corporate collaboration, licensing arrangements and grants. Based upon the Company's current operating plan, the Company believes that the Company's cash and cash equivalents as of December 31, 2023, will not be sufficient to enable the Company to fund its operating expenses and capital expenditure requirements for a period of at least 12 months following the issuance of the financial statements included elsewhere in this Annual Report without an additional equity or debt financing. On March 28, 2024, the Company entered into a securities purchase agreement with certain purchasers named therein related to the private placement of an aggregate of 2,532,285 units, each comprised of (i) (A) one share of common stock or (B) one Pre-Funded Warrant and (ii) one Series A Warrant. The 2024 Private Placement is expected to close on or about April 1, 2024, subject to customary closing conditions. The aggregate upfront gross proceeds from the 2024 Private Placement are expected to be approximately \$50 million, before deducting offering fees and expenses, and additional gross proceeds of up to approximately \$99.4 million may be received if the Series A Warrants are exercised in full for cash. The foregoing estimate does not reflect the Company's expected receipt of proceeds from the 2024 Private Placement.

The Company's estimates and expectations regarding its cash runway are based on assumptions that may prove to be incorrect, and changing circumstances could cause it to consume capital faster or in different ways than the Company currently expects. For example, the RewinD-LB Trial may be more expensive, time-consuming, or difficult to implement than the Company currently anticipates. Because the length of time and activities associated with the successful development of neflamapimod are highly uncertain, the Company is unable to estimate the actual funds it will require to complete research and development and ultimately commercialize its drug candidate for one or more indications.

The Company's future capital requirements will depend on, and could increase significantly as a result of, many factors, including:

- the enrollment, progress, timing, costs and results of the RewinD-LB Trial and any future phase 3 trial evaluating neflamapimod in DLB, as well as if and when it pursues additional development plans for neflamapimod in other disease indications, such as recovery after anterior circulation ischemic stroke or EOAD;
- the outcome, timing and cost of meeting regulatory requirements established by the FDA and other comparable foreign regulatory authorities;
- its ability to reach certain milestone events set forth in its collaboration agreements and the timing of such achievements, triggering obligations to make applicable payments;
- the hiring of additional clinical, scientific and commercial personnel to pursue the Company's development plans, as well the increased costs of internal and external resources as to support the Company's operations as a public reporting company;
- the cost and timing of securing manufacturing arrangements for clinical or commercial production;
- the cost of establishing, either internally or in collaboration with others, sales, marketing and distribution capabilities to commercialize neflamapimod, if approved;
- the cost of filing, prosecuting, enforcing, and defending its patent claims and other intellectual property rights, including defending against any patent infringement actions brought by third parties against the Company;
- the ability to receive additional non-dilutive funding, including the Company's pending request for additional funding under the NIA Grant and other grants from organizations and foundations;
- the Company's ability to establish strategic collaborations, licensing or other arrangements with other parties on favorable terms, if at all; and
- the extent to which the Company may in-license or acquire other product candidates or technologies.

The Company may raise additional capital in the future through a variety of sources, including public or private equity offerings, debt financings, grant funding, or strategic collaborations and licensing arrangements. However, adequate additional financing may not be available to the Company on acceptable terms, or at all. The Company's failure to raise capital as and when needed would have a negative effect on its financial condition and its ability to pursue its business strategy. If the Company is unable to secure additional capital in sufficient amounts or on terms acceptable to the Company, it may have to delay, scale back or discontinue its development or commercialization activities for neflamapimod.

Further, to the extent that the Company raises additional capital through the sale of common stock or securities convertible or exchangeable into common stock, current stockholder's ownership interest in the Company will be diluted. In addition, any debt financing may subject the Company to fixed payment obligations and covenants limiting or restricting its ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If the Company raises additional capital through collaborations, strategic alliances or licensing arrangements with third parties, the Company may have to relinquish certain valuable intellectual property or other rights to its product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable to it. Even if the Company were to obtain sufficient funding, there can be no assurance that it will be available on terms acceptable to the Company or its stockholders.

The Company currently does not have, and may never have, any products that generate significant revenues.

The Company is a clinical-stage biopharmaceutical company focused on developing treatments for age-related neurologic disorders, currently has no products that are approved for commercial sale, and it is possible it may never be able to develop a marketable product. To date, the Company has not generated any revenues from its lead product candidate, neflamapimod, or from any other product candidate. The Company cannot guarantee that neflamapimod, or any other product candidate that it may develop or acquire in the future, will ever become a marketable product.

The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of drug products are subject to extensive regulation in the U.S. and in other countries. Before the FDA and other regulatory authorities in the European Union and elsewhere will approve neflamapimod (or any other drug candidate) for commercialization, the Company must demonstrate that it satisfies rigorous standards of safety and efficacy for each of its intended uses. If approved, in order to compete effectively in the commercial marketplace, drugs must be easy to administer, cost-effective and economical to manufacture on a commercial scale. The Company may not achieve any of these objectives.

The Company initiated its RewinD-LB Trial in the second quarter of 2023 and anticipates completing enrollment in the study in the second quarter of 2024. The Company cannot be certain that the RewinD-LB Trial or any future clinical development of neflamapimod will be successful, or that it will receive the regulatory approvals required to commercialize neflamapimod for any intended use, or that any future research and drug discovery programs undertaken by the Company will yield a drug candidate suitable for investigation through clinical trials. Even if the Company is able to successfully develop neflamapimod through approval and commercialization, any revenues from sales of the drug may not materialize for several years, if at all.

The Company has a history of operating losses and expect to continue to incur losses in the foreseeable future, which raises substantial doubt about its ability to continue as a going concern.

As discussed further in Note 2 to the Company's consolidated financial statements included elsewhere in this Annual Report, the Company has a history of operating losses and expects to continue to incur losses in the foreseeable future, which raises substantial doubt regarding the Company's ability to continue as a going concern. As described in further detail above, the Company currently has no sources of revenue and its ability to continue as a going concern is dependent on its ability to raise capital to fund operations and future business plans. Additionally, volatility in the capital markets and general economic and geopolitical conditions in the U.S. and globally may be a significant obstacle to raising the required funds as and when needed. The Company's consolidated financial statements do not include any adjustments that might be necessary should the Company be unable to continue as a going concern. If the going concern basis were not appropriate for these financial statements, adjustments would be necessary in the carrying value of assets and liabilities, the reported expenses and the balance sheet classifications used. If the Company is unable to continue as a going concern, its stockholders could suffer the loss of all or a substantial portion of their investment in us.

The RewinD-LB Trial is funded by a non-dilutive grant that is subject to certain conditions for funding in subsequent years.

The Company's RewinD-LB Trial is funded by a grant from the NIA, the funds from which will be disbursed over the course of the study as costs are incurred. The Company's receipt of the funds awarded to support future year costs are subject to both the availability of funds (i.e., the NIA is funded by Congress in subsequent fiscal years) and the Company's demonstration of progress in the project that is in line with the timelines provided in the grant. If such funds are no longer available, including due to a government shutdown that prohibits the disbursal of such funds, or the Company fails to demonstrate such progress, the Company's ability to continue its clinical programs may be impaired and delayed, and the Company may otherwise need to seek additional financing. For example, the Company was granted access to \$7.3 million under the NIA Grant in February 2024, 90% of the full amount of the second year of funding provided for in the NIA Grant, due to current NIA policy as a result of the U.S. government currently being funded on the basis of a continuing resolution. The timing of the Company's receipt of the remaining 10% of the grant, or \$0.8 million, of current year funding is dependent upon and subject to U.S. congressional approval of a final appropriations bill.

In addition, in December 2023, we submitted a request for supplemental funds in the amount of \$4.0 million, of which, if approved, \$3.9 million would be received in the current year and the remainder would be received in next the funding year. The request for supplemental funds was initially reviewed by the NIA in January 2024 but, due to the NIA currently working under the Continuing Resolution, completion of the review was delayed and the request is currently scheduled to be reviewed for approval in May 2024. We currently expect to receive the remaining 10%, or \$0.8 million, of the previously approved year 2 funding upon U.S. congressional approval of a final appropriations bill, the supplemental amount of \$4.0 million following NIA review of our supplement request, and the year 3 funding of \$6.2 million in February 2025. However, there can be no guarantee that the NIA will approve this supplement request and that any such amounts will be received. If the Company is unable to secure additional capital through approval of the supplemental request or other means, it may have to delay, scale back or discontinue its development or commercialization activities for neflamapimod.

The Company could be subject to audit and repayment of the NIA Grant.

In connection with the NIA Grant, the Company may be subject to routine audits by certain government agencies. As part of an audit, these agencies may review the Company's performance, cost structures and compliance with applicable laws, regulations, policies and standards and the terms and conditions of the applicable NIA Grant. If any of the Company's expenditures are found to be unallowable or allocated improperly or if the Company has otherwise violated terms of the NIA Grant, the expenditures may not be reimbursed and/or it may be required to repay funds already disbursed. Any such audit may result in a material adjustment to the Company's results of operations and financial condition and harm the Company's ability to operate in accordance with its business plan.

The Company may be required to make significant payments to Vertex in connection with the Company's license agreement.

Pursuant to the Vertex Agreement, the Company previously acquired an exclusive license to develop and commercialize neflamapimod for the diagnosis, treatment, and prevention of AD and other CNS disorders. Under the Vertex Agreement, the Company is subject to significant potential future obligations, including payment of development milestones and royalties on net product sales, as well as other material obligations. The Vertex Agreement sets forth specific regulatory and product approval events and the related payments that the Company would be obligated to make to Vertex, if and when such events occur.

Among other obligations, the Vertex Agreement provides that the Company will make royalty payments to Vertex in the event aggregate net sales for a commercialized licensed product meet specified thresholds, subject to adjustment in the event of certain events, such as the absence of a valid patent claim or if fees are due to a third party for a license necessary for the development, manufacture, sale or use of a licensed product. Such royalties will be on a sliding scale as a percentage of net sales, depending on the amount of net sales in the applicable years. The Company is also obligated to make a milestone payment to Vertex upon net sales reaching a certain specified amount in any 12-month period.

The first expected milestone events concern filing of an NDA with the FDA for marketing approval of a licensed product in the U.S., or a similar filing for a non-U.S. major market. Thus, although the Company does not expect any milestone or royalty payments to be due until such time, these potential obligations represent significant cash amounts that it may ultimately be obligated to pay. The Company cannot guarantee that it will have sufficient funds available to meet its obligations if and when these payments become due. The obligation to pay some or all of these milestone and royalty amounts may materially harm the Company's development efforts, as well as its overall financial condition.

The Company may expend its limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

The Company intends to focus its limited financial and other resources on developing neflamapimod and future product candidates for specific indications that the Company identifies as most likely to succeed, in terms of both regulatory approval and commercialization. As a result, the Company may forego or delay pursuit of opportunities with other product candidates or for other indications that may prove to have greater commercial potential. The Company's resource allocation decisions may cause the Company to fail to capitalize on viable commercial products or profitable market opportunities. Spending on current and future research and development programs and on product candidates for specific indications may not yield any commercially viable products. If the Company does not accurately evaluate the commercial potential or target market for a particular product candidate, it may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for the Company to retain sole development and commercialization rights to such product candidate.

Risks Related to the Company's Product Development and Regulatory Approval

The Company is heavily dependent on the success of its lead product candidate, neflamapimod, which is still under clinical development. If neflamapimod does not receive regulatory approval or is not successfully commercialized, the Company's business will be materially harmed.

The Company has invested almost all of its efforts and financial resources to date in the development of neflamapimod. To date, the Company has not initiated or completed a pivotal clinical trial, obtained marketing approval for any product candidate, manufactured a commercial scale product or arranged for a third party to do so on its behalf, or conducted sales and marketing activities necessary for successful product commercialization. The Company's future success is substantially dependent on its ability to successfully complete clinical development of, obtain regulatory approval for, and successfully commercialize neflamapimod as a treatment for DLB and additional indications, which may never occur.

The Company expects a substantial portion of its efforts and expenditures over the next few years will be devoted to the advancement of neflamapimod's clinical development. In order to be successful, the Company will need to successfully manage clinical and manufacturing activities, the pursuit of regulatory approval in multiple jurisdictions, securing manufacturing supply, building a commercial organization, and significant marketing efforts, among other requirements, before it can generate any revenues from commercial sales. The Company cannot be certain that it will be able to successfully complete any or all of these activities.

Furthermore, the Company has not submitted an NDA to the FDA or comparable applications to other regulatory authorities for neflamapimod, and it does not expect to be in a position to do so in the near future, if ever. Significant additional clinical testing and research will be required before it can file an NDA or any other application seeking approval of neflamapimod for the treatment of DLB, or any other indication. If the Company is unable to obtain the necessary regulatory approvals for and commercialize neflamapimod, it would materially adversely affect the Company's financial position, and the Company may not be able to generate sufficient revenue to continue its business.

The development and commercialization of drug products is subject to extensive regulation, and the regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time-consuming, and inherently unpredictable. There is no guarantee that the Company's planned clinical trials for neflamapimod to treat patients with DLB, or in any other indications that the Company may pursue, will be successful. If the Company is ultimately unable to obtain regulatory approval for neflamapimod on a timely basis, or at all, its business will be substantially harmed.

Clinical trials are expensive and can be difficult to design and implement. Such trials can take many years to complete, and their outcomes are inherently uncertain. Failure can occur at any stage during the clinical development process. The Company may experience difficulties in initiating and completing the clinical trials that it intends to conduct, and the Company does not know whether such trials will enroll patients on time, need to be redesigned, or be completed on schedule, if at all. In connection with designing and conducting its clinical trials, the Company faces significant risks, including that its product candidate may not prove to be efficacious, patients may suffer adverse effects for reasons that may or may not be related to the product candidate being tested, the results may not confirm the positive results of its earlier preclinical studies and clinical trials, and the results may not meet the level of statistical significance required by the FDA or other regulatory agencies to support approval.

For example, in the Company's AscenD-LB Trial, neflamapimod demonstrated improvement versus placebo in dementia severity and motor function. Although the Company's ongoing RewinD-LB Trial was designed as a confirmatory, hypothesis-testing, randomized, double-blind placebo-controlled clinical study of neflamapimod in subjects with DLB, the RewinD-LB Trial may not be successful, or the FDA may disagree with the Company's interpretation of the clinical trial data or how those data inform the design of a potentially pivotal Phase 3 clinical trial for the Company's lead indication. In addition, even if the AscenD-LB Trial results are confirmed in the RewinD-LB Trial, the Company will still need to successfully complete additional clinical trials, including a Phase 3 trial, before it is prepared to submit an NDA for regulatory approval of neflamapimod in patients with DLB, assuming that the data collected from the Company's clinical trials are deemed sufficient to support the submission of an NDA. The Company cannot predict with any certainty if or when it might complete its development efforts and submit an NDA for regulatory approval of neflamapimod, or whether any such NDA will be approved by the FDA. An NDA or comparable foreign submission seeking marketing approval for neflamapimod also may not be accepted by FDA or foreign regulatory authorities due to, among other reasons, the content or formatting of the submission.

This lengthy approval process, as well as the unpredictability of future clinical trial results, may result in the Company's failure to obtain regulatory approval to market neflamapimod as a treatment for DLB or any other indication, which would significantly harm the Company's business, results of operations, and prospects. The FDA and comparable foreign regulatory authorities have substantial discretion in the approval process, and determining when or whether regulatory approval will be obtained for any new product candidate. Accordingly, even if the Company believes the data collected from its clinical trials are promising, such data may not be sufficient to support approval by the FDA or any comparable foreign regulatory authority. As a result, the Company may be required to conduct additional nonclinical studies, alter its proposed clinical trial designs, or conduct additional clinical trials to satisfy the regulatory authorities in each of the jurisdictions in which it hopes to conduct clinical trials and develop and market neflamapimod or any of other product candidates, if approved.

The Company is also generally required to register certain clinical trials and post the results of completed clinical trials on a government-sponsored database, such as ClinicalTrials.gov in the U.S., within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. The Company may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of neflamapimod or any other product candidates the Company may develop or acquire.

The risk of failure in drug development is high. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, a company must complete nonclinical development and conduct extensive clinical trials to demonstrate the safety and efficacy of its product candidates in humans. Clinical trials are expensive, difficult to design and implement and can take several years to complete, and their outcomes are inherently uncertain with the potential for failure at any time during the clinical development process. Preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and early-stage clinical trials have nonetheless failed to obtain marketing approval of their products. It is impossible to predict when or if neflamapimod will receive marketing approval.

The Company may experience numerous unforeseen events during, or as a result of, its clinical trials that could delay or prevent its ability to receive marketing approval or commercialize neflamapimod for DLB or any other indication. Clinical trials may be delayed, suspended or prematurely terminated because costs are greater than the Company anticipates or for a variety of other reasons, such as:

- delay or failure in reaching agreement with the FDA or a comparable foreign regulatory authority on a trial design that the Company is able to execute;
- delay or failure in obtaining authorization to commence a trial, including approval from the appropriate IRB or ethics committee at each clinical site to conduct testing of a candidate on human subjects, or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial;
- delays in reaching, or failure to reach, agreement on acceptable terms with prospective trial sites and prospective CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- inability, delay or failure in identifying and maintaining a sufficient number of trial sites, many of which may already be engaged in other clinical programs;
- inability, delay or failure in identifying, recruiting, and training suitable clinical investigators;
- delay or failure in recruiting, screening, and enrolling suitable subjects to participate in a trial;
- delay or failure in having subjects complete a trial or return for post-treatment follow-up;
- delays caused by operational issues at clinical trial sites, including insufficient staffing;
- changes to the clinical trial protocols and/or changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- clinical sites and investigators deviating from the clinical protocol, failing to conduct the trial in accordance with Good Clinical Practices or other regulatory requirements, or dropping out of a trial;
- failure to initiate or delay of or inability to complete a clinical trial as a result of the authorizing IND or foreign clinical trial application being placed on temporary or permanent clinical hold by the FDA or comparable foreign regulatory authority;
- lack of adequate funding to continue a clinical trial, including as a result of unforeseen costs due to enrollment delays, requirements to conduct additional clinical trials and increased expenses associated with the services of the Company's CROs and other third parties, or the cost of clinical trials being greater than the Company anticipated;
- delays in manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of drug product for use in clinical trials or the inability to do any of the foregoing;
- developments on trials conducted by competitors for related technology that raise FDA or foreign regulatory authority concerns about risk to patients of a technology or in any indication more broadly;
- clinical trials of the Company's product candidates may produce negative or inconclusive results, and the Company may decide, or regulators may require the Company, to conduct additional nonclinical studies, clinical trials or abandon product development programs;
- the number of patients required for clinical trials of the Company's product candidates may be larger than the Company anticipates, enrollment in these clinical trials may be slower than it anticipates or participants may drop out of these clinical trials at a higher rate than it anticipates;
- the Company's third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to the Company in a timely manner, or at all;
- regulators, the IRB or a Data Safety Monitoring Board if one is used for the Company's clinical trials, may require that the Company suspend or terminate its clinical trials for various reasons, including noncompliance with regulatory requirements, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, or a finding that the participants are being exposed to unacceptable health risks;

- the supply or quality of the Company's product candidates or other materials necessary to conduct clinical trials of the Company's product candidates may be insufficient or inadequate;
- transfer of manufacturing processes to larger-scale facilities operated by a CMO, and delays or failure by the Company's CMOs or the Company to make any necessary changes to such manufacturing process;
- the FDA or comparable foreign regulatory authorities may require the Company to submit additional data or impose other requirements before permitting it to initiate a clinical trial; or
- changes in governmental regulations or administrative actions.

Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of marketing approval for neflamapimod or any other future product candidates. Further, the FDA or comparable foreign regulatory authorities may disagree with the Company's clinical trial design and the Company's interpretation of data from clinical trials or may change the requirements for approval even after the FDA has reviewed and commented on the design for the Company's clinical trials.

If the Company is required to conduct additional clinical trials or other preclinical studies of neflamapimod in various disease conditions beyond those that the Company currently contemplates, if it is unable to successfully complete clinical trials of the Company's product candidates or other studies, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, the Company may:

- be delayed in obtaining marketing approval for its product candidates;
- not obtain marketing approval for its product candidates at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings that would reduce the potential market for its products or inhibit its ability to successfully commercialize the Company's products;
- be subject to additional post-marketing restrictions or requirements, including post-marketing testing; or
- have the product removed from the market after obtaining marketing approval.

Any failure or delay in commencing or completing clinical trials or obtaining regulatory approvals for neflamapimod would delay the Company's commercialization prospects, substantially increase the costs of commercializing neflamapimod, and severely harm the Company's business and financial condition.

The Company has concentrated its research and development efforts on the treatment of DLB, a disease that has seen limited success in drug development. The ability to successfully develop drugs for DLB and other age-related neurologic disorders is extremely difficult and is subject to a number of unique challenges. In addition, its rationale for neflamapimod in the treatment of DLB is based on a scientific understanding of the disease that may be wrong.

Drug development in the field of brain diseases, including age-related neurologic disorders and other neurodegenerative diseases in particular, has seen very limited success historically. There have been limited efforts by biopharmaceutical and pharmaceutical companies to develop treatments for DLB and there are no therapies available for patients that have been approved with a specific indication to treat DLB. Only symptomatic therapies that are approved for other diseases, generally either AD or Parkinson's disease, are currently utilized to manage patients with DLB. In addition, many potential disease-modifying therapies have been evaluated in other neurodegenerative diseases, particularly in AD, and these have encountered challenges in their development and, as a result, only recently two disease-modifying treatments to treat AD have been approved in the U.S. Developing a product candidate for treatment of these brain diseases is extremely difficult and subjects the Company to a number of challenges, including obtaining regulatory approval from the FDA and other regulatory authorities who have only a limited set of precedents to rely on.

The Company's approach to the treatment of DLB focuses in large part on neflamapimod's ability to inhibit the intra-cellular enzyme p38 α . The expression of p38 α is considered to be a critical contributor in the toxicity of inflammation, alpha-synuclein, amyloid-beta and tau to neurons and synapses, which the Company and other scientific experts believe leads to synaptic dysfunction. Synaptic dysfunction, specifically impaired synaptic plasticity, leads to disruption of episodic memory and is a significant event in the development and symptomatology of DLB.

However, the Company cannot be certain that its approach will lead to the development of approvable or marketable products. To date the only drugs approved by the FDA to treat DLB have addressed the disease's symptoms. In addition, there has never been an approval of a drug in DLB and therefore, there are no regulatory precedents for endpoints in that indication. Consequently, the FDA has a limited set of products to rely upon in evaluating neflamapimod. This could result in a longer than expected regulatory review process, increased expected development costs or the delay or prevention of commercialization of neflamapimod for the treatment of DLB.

Moreover, given the history of clinical failures in this field, future clinical or regulatory failures by the Company or others may result in further negative perception of the likelihood of success in this field, which may significantly and adversely affect the Company's business and the market price of its common stock.

Enrollment and retention of participants in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside the Company's control.

The timely completion of clinical trials in accordance with their protocols depends on, among other things, the Company's ability to enroll a sufficient number of research participants who remain in the study until its conclusion. The Company may encounter delays in enrolling, or be unable to enroll, a sufficient number of individuals to complete any of its clinical trials, and even once enrolled the Company may be unable to retain a sufficient number of participants to complete any of its trials. Subject enrollment and retention in clinical trials depends on many factors, including:

- the eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the nature of the trial protocol;
- the proximity of potential subjects to clinical sites;
- the existing body of safety and efficacy data with respect to the product candidate;
- the Company's ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies;
- competing clinical trials being conducted by other companies or institutions;
- the risk that participants enrolled in clinical trials will drop out of the trials before completion; and
- the operational efficiency of trial sites, including sufficient staffing.

In addition, the U.S. Congress recently amended the FDCA to require sponsors of a Phase 3 clinical trial, or other "pivotal study" of a new drug or biologic to support marketing authorization, to design and submit a diversity action plan for such clinical trial. The action plan must describe appropriate diversity goals for enrollment, as well as a rationale for the goals and a description of how the sponsor will meet them. Although none of our product candidates has reached Phase 3 of clinical development, we or our licensing partners must submit a diversity action plan to the FDA by the time a Phase 3 trial, or pivotal study, protocol is submitted to the agency for review, unless we or our licensing partners are able to obtain a waiver for some or all of the requirements for a diversity action plan. It is unknown at this time how the diversity action plan may affect the planning and timing of any future Phase 3 trial for our product candidates or what specific information FDA will expect in such plans. However, initiation of such trials may be delayed if the FDA objects to a proposed diversity action plans for any future Phase 3 trial of our product candidates, and we or our licensing partners may experience difficulties recruiting a diverse population of patients in attempting to fulfill the requirements of any approved diversity action plan.

Furthermore, any negative results the Company may report in clinical trials may make it difficult or impossible to recruit and retain subjects in other clinical trials of that same product candidate. Delays or failures in planned enrollment or retention of clinical trial subjects, including in the Company's ongoing RewinD-LB Trial, may result in increased costs or program delays, which could have a harmful effect on the Company's ability to develop a product candidate or could render further development impossible.

Results of preclinical studies and early clinical trials may not be indicative of results obtained in later trials. In addition, preliminary, topline and interim data from the Company's clinical trials that the Company may announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

The results of preclinical studies and early clinical trials of a product candidate, including neflamapimod, may not be predictive of the results of later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry, both generally and in the DLB treatment space in particular, have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Even if the Company's clinical trials for neflamapimod are completed as planned, including a future Phase 3 trial, the Company cannot be certain that their results will support the safety and efficacy sufficient to obtain regulatory approval, and the Company may decide, or regulators may require it, to conduct additional clinical trials.

In addition, from time-to-time, the Company may announce or publish preliminary, topline, or interim data from its clinical trials, which are based on a preliminary analysis of then-available data. Such results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. The Company also makes assumptions, estimations, calculations and conclusions as part of its analyses of data, which may prove to be incomplete or flawed, and it may not have received or had the opportunity to fully and carefully evaluate all data. Preliminary and interim data are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or interim data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data the Company previously published. As a result, preliminary and interim data are not necessarily predictive of final results and should be viewed with caution until the final data are available. Adverse differences between preliminary or interim data and final data could significantly harm the Company's business prospects.

Moreover, clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain approval from the FDA, the EMA or other regulatory agencies for their products. Others, including regulatory agencies, may not accept or agree with the Company's assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate and the Company in general.

In addition, the information the Company chooses to publicly disclose regarding a particular study or clinical trial is typically selected from a more extensive amount of available information. Others may not agree with what the Company determines is the material or otherwise appropriate information to include in its disclosure, and any information the Company determines not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding neflamapimod, a future product candidate, or the Company's business. If the interim, preliminary, or topline data that the Company reports differ from later, final or actual results, or if others, including the FDA and comparable foreign regulatory authorities, disagree with the conclusions reached, the Company's ability to obtain approval for and, if approved, commercialize its product candidates may be harmed, which could harm its business, financial condition, results of operations and prospects.

Regulatory authorities, including the FDA, may not accept data from clinical trials conducted outside of their jurisdiction.

The Company has in the past and may in the future conduct additional clinical trials evaluating its product candidates, including neflamapimod, outside the U.S. The acceptance of trial data from clinical trials conducted outside the U.S. by the FDA may be subject to certain conditions or may not be accepted at all, and other comparable non-U.S. regulatory authorities may have similar restrictions and conditions with respect to clinical trials conducted outside of their jurisdiction. In cases where data from non-U.S. clinical trials are intended to serve as the basis for marketing approval in the U.S., the FDA will generally not accept such foreign trial data unless: (i) the data are determined to be applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations; and (iii) the FDA is able to validate the data through an onsite inspection, if necessary. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many comparable non-U.S. regulatory authorities have similar approval requirements.

There can be no assurance that the FDA will accept data from trials conducted outside of the U.S. or that any comparable non-U.S. regulatory authority will accept data from trials conducted outside of the applicable jurisdiction. If the FDA or any comparable non-U.S. regulatory authority does not accept such data or believes that additional data is necessary to supplement such data, it would result in the need for additional trials, which would be costly and time-consuming, could delay a product candidate's development plan, and which may result in product candidates not receiving approval for commercialization in the applicable jurisdiction.

Conducting clinical trials outside the U.S. may also expose the Company to additional risks, including risks associated with the following, among other things: additional foreign regulatory requirements; foreign exchange fluctuations; compliance with foreign manufacturing, customs, shipment and storage requirements; the failure of enrolled subjects in foreign countries to adhere to clinical protocol as a result of differences in standard-of-care; cultural differences in medical practice and clinical research; diminished protection of intellectual property rights; and compliance with general local legal requirements.

Safety issues with neflamapimod or with any other product candidate the Company may develop or acquire in the future, or with product candidates or approved products of third parties that are similar to the Company's product candidates, could give rise to delays in the regulatory approval process, restrictions on labeling or product withdrawal after approval, if any, or may otherwise cause the Company to modify or supplement its clinical development program.

Results of any clinical trial the Company conducts could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Serious adverse events or undesirable side effects caused by neflamapimod, or any other product candidates the Company may develop or acquire, could cause it or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign authorities. Many compounds that have initially showed promise in clinical or earlier stage testing are later found to cause undesirable or unexpected side effects that prevented further development of the compound. Further, problems with product candidates or approved products marketed by third parties that utilize the same therapeutic target or that belong to the same therapeutic class as neflamapimod or any future product candidates of the Company could adversely affect the development, regulatory approval and commercialization of the Company's product candidates.

For example, to date, neflamapimod has been evaluated in over 200 patients, at doses up to 750 mg twice a day, and up to 24 weeks of treatment. The adverse effects (side effects) seen in more than 5% of neflamapimod-treated patients include headache (10% in neflamapimod-treated patients vs. 5% in placebo recipients), diarrhea (10% vs. 5%), abdominal pain (6% vs. 5%), respiratory infection (5% vs. 5%), and falls (5% vs. 5%). In each case, these events were generally mild and in all but one case (a case of diarrhea and abdominal pain) did not lead to treatment discontinuation. In addition, increased levels of certain "liver enzymes" in the blood are a well-known dose-dependent side effect of p38 MAPK inhibitors. These liver enzymes, aspartate aminotransferase and alanine aminotransferase, are proteins commonly produced in the liver, the measurements of which can help doctors evaluate liver function. In an early 2000s study of neflamapimod conducted by Vertex, during 12 weeks of dosing at 250mg BID (i.e., four-fold higher daily dosing than the dose in the RewinD-LB Trial) in 44 subjects with rheumatoid arthritis, elevations in such liver enzymes levels were noted in six subjects (14%).

After the Company acquired an exclusive license from Vertex to develop and commercialize neflamapimod for the treatment of AD and other CNS disorders, the Company submitted an IND application to the DNP in February 2015. The DNP cleared the Company's clinical trial application in March 2015. However, in August 2015, following a standard review of the long-term animal toxicity studies, the DNP placed a partial clinical hold on the Company's then ongoing Phase 2a study in AD and any subsequent studies proposed under the IND. A partial clinical hold means that the FDA suspends part of the clinical work requested under the IND (e.g., a specific protocol or part of a protocol is not allowed to proceed); however, all other protocols and/or remaining parts of the protocol are allowed to proceed under the IND. Under DNP's partial clinical hold that remains in effect for the neflamapimod IND, the agency limited administration of neflamapimod to doses that lead to plasma drug levels that provide a ten-fold safety margin to human subjects, based on the plasma drug levels in animals that had previously led to minimal or equivocal toxicity findings. The Company's current understanding of plasma drug levels achieved with neflamapimod in humans means that its investigational dosing in the U.S. is limited by this partial clinical hold to no more than 40 mg three times daily in patients weighing 50 kg (110 lbs.) or more.

The Company's ongoing RewinD-LB Trial is being conducted at 40mg three times daily (limited to patients weighing 50 kg (110 pounds) or more within the U.S., and not so limited outside the U.S.) and the Company does not expect this partial clinical hold to impact its ongoing and planned clinical trials or its current development plan for neflamapimod. With respect to the adverse effects discussed above, the patients were asymptomatic, there were no associated increases in bilirubin, and the elevations resolved with treatment discontinuation. Furthermore, no liver enzyme abnormalities were observed in the AscenD-LB Trial. However, as the Company continues the development and clinical trials of neflamapimod, treatment-related SAEs may arise in the future. Side effects that are deemed to be drug-related could affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Undesirable side effects in one of the Company's clinical trials for neflamapimod in one indication could adversely affect enrollment in clinical trials, regulatory approval and commercialization of the Company's product candidate in other indications. These side effects may not be appropriately recognized or managed by the treating medical staff. In addition, discovery of previously unknown class effect problems may prevent or delay clinical development and commercial approval of product candidates or result in restrictions on permissible uses after their approval. If the Company or others identify undesirable side effects caused by the mechanisms of action of a product candidate or a class of product candidates, the FDA may require the Company to conduct additional clinical trials, or to implement a REMS program prior to commercial approval. Alternatively, regulatory authorities may not approve the product candidate or, as a condition of approval, may require specific warnings and contraindications or place certain limitations on how the Company can promote the drug. Following a potential future drug product approval, regulatory authorities might also withdraw such approval due to the discovery of previously unknown safety issues relating to the product and require the Company to take its drug off the market. Any of these occurrences may harm the Company's business, financial condition and prospects significantly.

Further, clinical trials, by their nature, utilize a sample of the potential patient population. With a limited number of patients, rare and severe side effects of neflamapimod or future product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate. If neflamapimod, or any other product candidates the Company may develop or acquire, receives marketing approval and the Company or others identify undesirable side effects caused by such product candidates (or any other similar products) after such approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit their approval of such product candidates;
- regulatory authorities may require the addition of labeling statements, such as a "Boxed" Warning or a contraindication;
- the Company may be required to change the way such product candidates are distributed or administered, conduct additional clinical trials or change the labeling of the product candidates;
- the FDA may require a REMS plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools, and regulatory authorities in other jurisdictions may require comparable risk mitigation plans;
- the Company may be subject to regulatory investigations and government enforcement actions;
- the FDA or a comparable foreign regulatory authority may require the Company to conduct additional clinical trials or costly post-marketing testing and surveillance to monitor the safety and efficacy of the product;
- the Company may decide to recall such product candidates from the marketplace after they are approved;
- the Company could be sued and held liable for injury caused to individuals exposed to or taking its product candidates; and
- the Company's reputation may suffer.

The Company may be unable to obtain regulatory approval in the U.S. or foreign jurisdictions and, as a result, be unable to commercialize its product candidates and its ability to generate revenue will be materially impaired.

The time required to obtain FDA and other approvals is unpredictable but typically takes many years following the commencement of clinical trials, depending upon the type, complexity and novelty of the product candidate. The standards that the FDA and its foreign counterparts use when regulating companies such as ours are not always applied predictably or uniformly and can change. Any analysis we perform of data from chemistry, manufacturing and controls, preclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unexpected delays or increased costs due to new government regulations, for example, from future legislation or administrative action, or from changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. It is impossible to predict whether legislative changes will be enacted, or whether FDA or foreign regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be. Any delay or failure in obtaining required approvals could adversely affect our ability to generate revenues from the particular product candidate for which we are seeking approval.

Furthermore, obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of a product candidate, similar foreign regulatory authorities must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval and licensure procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, including additional nonclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

If the Company seeks to enter into collaborative arrangements or strategic alliances for its drug candidates, but fails to enter into and maintain successful relationships, it may have to reduce or delay its drug development activities or increase its expenditures.

An important element of a biotechnology company's strategy for developing, manufacturing and commercializing its drug candidates may be to enter into strategic alliances with pharmaceutical companies or other industry participants to advance its programs and enable it to maintain its financial and operational capacity. Biotechnology companies at the Company's stage of development sometimes rely upon collaborative arrangements or strategic alliances to complete the development and commercialization of drug candidates, particularly after the Phase 2 stage of clinical testing.

To date, the Company has not entered into any collaborative arrangements or strategic alliances, and it may face significant competition in seeking such relationships. In addition, such arrangements may place the development of the Company's drug candidates outside its control, require the Company to relinquish important rights, or may otherwise be on terms unfavorable to the Company. The Company may not be able to negotiate collaborations and alliances on acceptable terms, if at all. If the Company enters a collaborative arrangement and it proves to be unsuccessful, the Company may have to delay, or limit the size or scope of, certain of its drug development activities.

Alternatively, if the Company elects to fund drug development or research programs on its own, it will have to increase its expenditures and will need to obtain additional funding, which may not be available to the Company on acceptable terms, if at all.

If the Company is unable to take full advantage of regulatory programs designed to expedite drug development or provide other incentives, its development programs may be adversely impacted.

There are a number of programs administered by the FDA and other regulatory bodies to facilitate and expedite development of drugs in areas of unmet medical need. For example, neflamapimod received a fast track designation in October 2019 from the FDA for investigation as a treatment of DLB. Fast track designation is granted by FDA, in response to a sponsor's request, upon a determination that the product candidate is intended to treat a serious or life-threatening disease or condition and has the potential to address an unmet medical need, meaning it could provide a therapeutic option for patients where none exists or a therapy that may be potentially superior to existing therapy based on efficacy or safety factors.

Fast track designation does not ensure that neflamapimod will receive marketing approval or that approval will be granted within any particular timeframe. Although fast track designation and other available FDA programs may expedite the development or approval process for certain drug candidates, such programs do not change the standards for approval, and the Company may not experience a faster development or regulatory review or approval process with fast track designation compared to conventional FDA procedures. In addition, the FDA may withdraw fast track designation for neflamapimod if it believes that the designation is no longer supported by data from the Company's clinical development program.

Neflamapimod may not qualify for or maintain designations under this or other programs under any of the FDA's existing or future programs to expedite drug development in areas of unmet medical need. The Company's inability to fully take advantage of these programs may require the Company to run larger trials, incur delays, lose opportunities that may not otherwise be available to it, and incur greater expense in the development of its product candidates.

The Company relies on third parties to conduct, supervise and monitor its clinical trials. If those third parties do not successfully carry out their contractual duties, or if they perform in an unsatisfactory manner, the Company's business will be harmed.

Although the Company designs and manages its nonclinical studies and clinical trials, it does not currently have the ability to conduct clinical trials for neflamapimod on its own. The Company has relied, and will continue to rely, on third parties such as CROs, medical institutions, and clinical investigators to ensure the proper and timely conduct of its clinical trials. The Company's reliance on CROs for clinical development activities limits its control over these activities, but the Company remains responsible for ensuring that each of its trials is conducted in accordance with the applicable protocol, as well as legal and regulatory and scientific standards. The Company has limited control over these third parties, and they may not devote sufficient time and resources to the Company's projects, or their performance may be substandard, resulting in clinical trial delays or suspensions, delays in submission of marketing applications or failure of a regulatory authority to accept the Company's applications for filing. There is no assurance that the third parties the Company engages will be able to provide the functions, tests, activities or services as agreed upon, or provide them at the agreed upon price and timeline or to the Company's requisite quality standards, including due to geopolitical events, natural disasters, public health emergencies or pandemics, or poor workforce relations or human capital management.

The Company and its CROs are required to comply with GLP requirements for preclinical studies and GCP requirements for clinical trials, which are regulations and guidelines enforced by the FDA and required by comparable foreign regulatory authorities. If the Company or its CROs fail to comply with GCP requirements, the clinical data generated in the Company's clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require the Company to perform additional clinical trials before approving marketing applications for the Company's product candidates. There is also no assurance these third parties will not make errors in the design, management or retention of the Company's data or data systems. Any failures by such third parties could lead to a loss of data, which in turn could lead to delays in clinical development and obtaining regulatory approval. Third parties may not pass FDA or other regulatory audits, which could also delay or prohibit regulatory approval. In addition, the cost of such services could significantly increase over time. If these third parties do not successfully carry out their contractual duties or obligations, fail to meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to the Company's clinical protocols or regulatory requirements or for any other reason, the Company's clinical trials may be extended, delayed or terminated, and it may not be able to obtain regulatory approval for, or successfully commercialize any product candidate that it develops. As a result, the Company's financial results and the commercial prospects for neflamapimod would be harmed, its costs could increase, and its ability to generate revenue could be delayed, all of which could have a material adverse effect on the Company's business, financial condition, results of operations and prospects.

The Company has employed several different CROs for clinical trial services. Although the Company believes there are numerous alternatives to provide these services, in the event that it seeks a new CRO, the Company may not be able to enter into replacement arrangements without delays or incurring additional expenses. Switching or adding additional CROs involves substantial cost and requires management's time and focus. In addition, there is a natural transition period when a new CRO commences work. Though the Company intends to carefully manage its relationships with its CROs, there can be no assurance that the Company will not encounter challenges or delays in the future or that these delays or challenges will not have an adverse impact on its business, financial condition and prospects.

The Company's reliance on third parties for the production of neflamapimod may result in delays in the Company's clinical trials or regulatory approvals and may impair the development and ultimate commercialization of neflamapimod, which would adversely impact the Company's business and financial position.

The Company has no manufacturing facilities and does not have extensive experience in the manufacturing of drugs or in designing drug-manufacturing processes. The Company currently relies on third parties for the manufacture of drug substance, the manufacture of drug product, and the packaging of drug product for clinical use. This reliance on contract manufacturers and suppliers subjects the Company to inherent uncertainties related to product safety, availability, security and cost. Holders of NDAs, or other forms of FDA approvals, or those distributing a regulated product under their own name, are ultimately responsible for compliance with manufacturing obligations even if the manufacturing is conducted by a third party.

The Company further intends to rely on third-party CMOs for the production of commercial supply of neflamapimod if it is ultimately approved. If CMOs cannot successfully manufacture drug substance and drug product for the Company's neflamapimod program, or any other product candidate that the Company may develop or acquire in the future, in conformity to its specifications and the applicable regulatory requirements, the Company will not be able to secure or maintain regulatory approval for the use of that product candidate in clinical trials, or for commercial distribution of that product candidate, if approved. Additionally, any problems the Company experiences with any such CMOs could delay the manufacturing of its product candidates, which could harm its results of operations. All drug manufacturers and packagers are required to operate in accordance with FDA-mandated cGMPs. A failure of any of the Company's current or future CMOs to establish and follow cGMPs and to document their adherence to such practices may lead to significant delays in obtaining regulatory approval of product candidates or the ultimate launch of products based on the Company's product candidates into the market. In the event of such failure, the Company could also face fines, injunctions, civil penalties, and other sanctions. Further, if the FDA or a comparable foreign regulatory authority finds deficiencies with or does not approve a CMO's facilities for the future commercial manufacture of neflamapimod, or if it withdraws any such approval or finds deficiencies in the future, the Company may need to find alternative manufacturing facilities, which would delay its development program and significantly impact its ability to obtain regulatory approval for or commercialize neflamapimod.

In addition, if any facility of the Company's third-party drug manufacturers or suppliers were to suffer an accident or a force majeure event such as war, missile or terrorist attack, earthquake, major fire or explosion, major equipment failure or power failure lasting beyond the capabilities of its backup generators or similar event, the Company could be materially adversely affected and any of its clinical trials could be materially delayed. An extended shut down may force the Company to procure a new research and development facility or another manufacturer or supplier, which could be time-consuming.

The Company's ongoing RewinD-LB Trial is being conducted with a drug substance (the API) previously manufactured at a third-party CMO. Future supplies of the neflamapimod drug substance could be interrupted from time to time, and the Company cannot be certain that alternative supplies could be obtained within a reasonable timeframe, at an acceptable cost, or at all. During this period, the Company may be unable to receive investigational neflamapimod supplies or any other product candidates it may develop or acquire. In addition, a disruption in the supply of drug substance could delay the commercial launch of the Company's product candidates, if approved, or result in a shortage in supply, which would impair its ability to generate revenues from the sale of its product candidates. Growth in the costs and expenses of raw materials may also impair the Company's ability to cost effectively manufacture its product candidates.

The Company also currently relies on a third-party CMO (different than that for the API) for the manufacture of neflamapimod drug product. The Company has used the same manufacturer for its neflamapimod drug product in all its clinical trials to date. If neflamapimod is ultimately approved for commercial sale, the Company expects to continue to rely on third-party contractors for manufacturing the drug product. Although the Company intends to do so prior to any commercial launch, it has not yet entered into long-term agreements for the commercial supply of either drug substance or drug product with its current manufacturing providers, or with any alternate manufacturers.

While the Company believes that there are multiple alternative sources available for manufacturing of both drug substance and drug product in its neflamapimod program, the Company may not be able to enter into replacement arrangements, on acceptable terms or at all, without delays or additional expenditures. It cannot estimate these delays or costs with certainty but, if they were to occur, they could cause a delay in the Company's development and commercialization efforts.

Although the Company generally has not, and does not intend to, begin a clinical trial unless it believes it has on hand, or will be able to obtain, a sufficient supply of neflamapimod to complete the clinical trial, any significant delay in the supply of neflamapimod drug substance or drug product could considerably delay conducting the Company's clinical trials and potential regulatory approval of its product candidates.

Further, third-party suppliers, manufacturers, or distributors may not perform as agreed or may terminate their agreements with the Company, including due to the effects related to geopolitical events, natural disasters, public health emergencies or pandemics, such as the COVID-19 pandemic, or force majeure events that affect their facilities or ability to perform. Any significant problem that the Company's suppliers, manufacturers, distributors or regulatory service providers experience could delay or interrupt supply of materials necessary to produce the Company's product candidates. Failure to obtain the needed quantities of the Company's product candidates could have a material and adverse effect on its business, financial condition, results of operations and prospects.

If the Company changes the manufacturers of its product candidates, it may be required to conduct comparability studies evaluating the manufacturing processes of the product candidates.

The FDA and other regulatory agencies maintain strict requirements governing the manufacturing process for prescription drug products that would apply to the Company's product candidates, if approved. For example, when a manufacturer seeks to make any change to the manufacturing process, the FDA typically requires the applicant to conduct nonclinical and, depending on the magnitude of the changes, potentially clinical comparability studies that evaluate the potential differences in the product candidates resulting from the change in the manufacturing process. If the Company were to change manufacturers of its drug substance or drug product during or after the clinical trials and regulatory approval process for neflamapimod or any of its other product candidates, the Company will be required to conduct comparability studies assessing product candidates manufactured at the new manufacturing facility. Further, manufacturing changes are generally categorized as having either a substantial, moderate, or minimal potential to adversely affect the identity, strength or quality of the drug product as they may relate to the safety or effectiveness of the product, and if a change has a substantial potential to have an adverse effect on the drug product, an applicant must submit and receive FDA approval of a prior approval supplemental application before the product made with the manufacturing change is distributed. Other forms of notice to the FDA are also required for manufacturing changes that have a moderate or minimal potential to have an adverse effect on the drug product's safety or effectiveness. Regardless of the type of manufacturing change, the methods used and the facilities and controls used for the manufacture, processing, packaging, or holding of human drugs must comply with applicable cGMP regulations.

Delays in designing and completing a comparability study to the satisfaction of the FDA or other regulatory agencies could delay or preclude the Company's development plans and, thereby, delay the Company's ability to receive marketing approval or limit its revenue and growth, once approved. In addition, in the event that the FDA or other regulatory agencies do not accept nonclinical comparability data, the Company may need to conduct a study involving dosing of patients comparing the two products. That study may result in a delay in the approval or launch of any of its product candidates.

Risks Related to the Company's Intellectual Property

If the Company does not adequately protect its proprietary rights, the Company may not be able to compete effectively.

The Company relies upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to neflamapimod. The Company's commercial success depends in part on obtaining and maintaining proprietary rights in the U.S. and in international jurisdictions, and successfully defending these rights against third-party challenges if and as they occur. The Company seeks to protect its proprietary position by filing patent applications related to neflamapimod in the U.S. and in other countries.

Although the Company has already obtained several issued patents and is working to expand its estate with additional patent applications, third parties may challenge the validity, enforceability, or scope of the Company's patents, which may result in such patents being narrowed, invalidated, or held unenforceable. Any successful opposition to these patents or any other patents owned by or licensed to the Company could deprive it of rights necessary for the successful commercialization of neflamapimod, or any other product candidates it may develop. Further, if the Company encounters delays in regulatory approvals due to patent-related issues, the period of time during which it could market a product candidate under patent protection could be reduced.

The Company's issued patents and patent applications also remain subject to uncertainty and continued monitoring. The Company's patent applications may fail to result in issued patents with claims that provide further coverage for neflamapimod in the U.S. or in foreign countries. The patent prosecution process is expensive and time-consuming, and the Company may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. The Company may also fail to identify further patentable aspects of its research and development output before it is too late to obtain patent protection, including as a result of the publication of prior art. There is also no assurance that all potentially relevant prior art relating to the Company's patents and patent applications has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application.

The patent position of life sciences companies can often involve complex legal and factual questions and in recent years has been the subject of significant litigation. Publications of discoveries in scientific literature often lag behind the actual discoveries, and patent applications in the U.S. and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, the Company cannot know with certainty whether it was the first to make the inventions claimed in its owned or licensed patents or pending patent applications, or that it was the first to file for patent protection of such inventions. Further, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and the Company's patents may be challenged in the courts or patent offices in the U.S. or other jurisdictions. Such challenges may result in patent claims being narrowed, invalidated, held unenforceable, in whole or in part, or reduced in term. Such a result could limit the Company's ability to prevent others from using or commercializing similar or identical technology and products.

Furthermore, generic drug manufacturers or other competitors may challenge the scope, validity or enforceability of the Company's patents, requiring it to engage in complex, lengthy and costly litigation or other proceedings. Generic drug manufacturers may also develop, seek approval for and launch generic versions of the Company's products.

Without patent protection for the Company's current or future product candidates, these candidates may be open to competition from other products. As a result, the Company's patent portfolio may not provide the Company with sufficient rights to exclude others from commercializing products similar or identical to the Company's.

The Company may also seek to rely on regulatory exclusivity for protection of its product candidates, if approved for commercial sale. Implementation and enforcement of regulatory exclusivity, which may consist of regulatory data protection and market protection, varies widely from country to country. Failure to qualify for regulatory exclusivity, or failure to obtain or to maintain the extent or duration of such protections that the Company expects for its product candidates, if approved, could affect the Company's decision on whether to market the products in a particular country or countries or could otherwise have an adverse impact on its revenue or results of operations.

There is currently no composition of matter patent protection that covers neflamapimod.

EIP acquired an exclusive license from Vertex in 2014 to develop and commercialize neflamapimod for the treatment of AD and other CNS disorders. This license covers know-how, preclinical and clinical data, and certain specified Vertex patent rights, including a composition of matter patent for neflamapimod that expired in 2017. EIP has thus focused its efforts on discoveries related to neflamapimod that are reflected in issued patents and patent applications covering a range of subjects, including: methods of treating patients suffering from DLB or AD, as well as methods of reducing amyloid plaque burden; methods of improving cognition and treating neurologic disorders; methods for promoting recovery of function in patients who have suffered acute neurologic injuries, including those resulting from various forms of stroke; and methods of treating patients suffering from dementia. In addition, EIP has filed patents related to formulations of neflamapimod, including pharmaceutical compositions for oral administration exhibiting desirable pharmacokinetics and processes for the manufacture thereof. In the U.S., the natural expiration of a patent is generally 20 years after it is filed. Although various extensions may be available, the life of a patent is limited.

Accordingly, there is currently no composition matter patent protection that covers neflamapimod. Rather, the Company's patents provide protection around either the use of neflamapimod for specific or medical indication (so called "use patents") or the administration of neflamapimod in specific manner (e.g., at a specific dose or in a specific formulation). Patents that are not around composition of matter are narrower in scope (i.e., they do not protect against development of neflamapimod in an indication other than that the patent defines), may be more difficult to defend against challenges against validity, and may be more difficult to enforce against infringement. For these reasons, some pharmaceutical companies choose not to develop and/or license compounds that are not covered by a composition of matter patent. The Company owns a patent that is issued in the U.S. around co-crystals of neflamapimod, any of which if they were successfully developed would be afforded composition of matter patent protection under this patent.

Accordingly, the lack of composition of matter patent protection that covers neflamapimod may subject the Company to increased risk of third-party litigation and/or reduce third party collaborators' interest in or valuation of neflamapimod, any of which could have an adverse effect on the Company's business, financial condition or results of operations.

If the Company fails to comply with its obligations under its existing license agreement with Vertex, or with any future intellectual property licenses with third parties, the Company could lose license rights that are important to its business.

The Company is party to the Vertex Agreement pursuant to which it acquired an exclusive license to develop and commercialize neflamapimod for the diagnosis, treatment, and prevention of AD and other CNS disorders. Under the terms of the Vertex Agreement, the Company must use commercially reasonable efforts during the license term to develop and obtain regulatory approval for a licensed product in specified major markets, and to promptly and effectively commercialize the licensed product once such approval is obtained. The Vertex Agreement also contains certain specified minimum diligence requirements, including making annual expenditures set forth in a development plan, and commencing a Phase 2 clinical trial of the licensed product within a specified time period.

The Vertex Agreement provides that either party may terminate the agreement if the other party is in material breach of its obligations thereunder, following a 60-day notice and cure period, or if the other party files for bankruptcy, reorganization, liquidation, receivership, or an assignment of a substantial portion of assets to creditors. The Vertex Agreement also provides that in the event the Company materially breaches any of certain specified diligence obligations as to a specific major market, Vertex's sole remedy for such breach, following the applicable notice and cure period, would be to terminate the license as to such specific major market country.

Accordingly, any uncured, material breach under the Vertex Agreement could result in the loss of certain of its rights to neflamapimod and could compromise the Company's development and commercialization efforts. This in turn would have an adverse effect on the Company's business, which could be material.

The Company may become subject to third parties' claims alleging infringement of their patents and proprietary rights, or the Company may need to become involved in lawsuits to protect or enforce its patents, either of which could be costly and time consuming, potentially delay or prevent the development and commercialization of the Company's product candidates, or put its patents and other proprietary rights at risk.

The Company's commercial success depends, in part, upon the Company's ability to develop, manufacture, market and sell its lead product candidate, neflamapimod, without alleged or actual infringement, misappropriation or other violation of the patents and proprietary rights of third parties. While the Company is not currently subject to any pending intellectual property litigation, and is not aware of any such threatened litigation, the Company may be exposed to future litigation by third parties based on claims that its product candidates, technologies or activities infringe the intellectual property rights of others. Some claimants may have substantially greater resources than the Company does and may be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than the Company. In addition, patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target the Company in the future. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that the Company's product candidates may be subject to claims of infringement of the intellectual property rights of third parties.

The Company may be subject to third-party claims including infringement, interference or derivation proceedings, reexamination proceedings, post-grant review and *inter partes* review before the USPTO or similar adversarial proceedings or litigation in other jurisdictions. Even if the Company believes such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed, and the holders of any such patents may be able to block the Company's ability to commercialize its applicable product candidate unless the Company obtained a license under the applicable patents, or until such patents expire or are finally determined to be invalid or unenforceable. These proceedings may also result in the Company's patent claims being invalidated or narrowed in scope. In addition, a court may hold that a third-party is entitled to certain patent ownership rights instead of the Company.

As a result of patent infringement claims, or in order to avoid potential infringement claims, the Company may choose to seek, or be required to seek, a license from the third party, which may require it to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if a license can be obtained on acceptable terms, the rights may be nonexclusive, which could give the Company's competitors access to the same intellectual property rights. If the Company is unable to enter into a license on acceptable terms, it could be prevented from commercializing one or more of its product candidates, forced to modify such product candidates, or to cease some aspect of the Company's business operations, which could harm the Company's business significantly. In addition, if the breadth or strength of protection provided by the Company's patents and patent applications is threatened, it could dissuade companies from collaborating with the Company to license, develop or commercialize current or future product candidates.

If the Company were to initiate legal proceedings against a third party to enforce a patent covering one of its product candidates, the defendant could counterclaim that the Company's patent is invalid or unenforceable. The outcome of proceedings involving assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity of patents, for example, the Company cannot be certain that there is no invalidating prior art of which the Company and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, the Company would lose at least part, and perhaps all, of the corresponding patent protection on its product candidates. Furthermore, the Company's patents and other intellectual property rights also will not protect its technology if competitors design around the Company's protected technology without infringing its patents or other intellectual property rights.

Finally, even if resolved in the Company's favor, litigation or other legal proceedings relating to intellectual property claims may cause the Company to incur significant expenses and could distract its technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, which could damage the Company's reputation, harm its business, and the price of its common stock could be adversely affected.

The Company may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect the Company's ability to develop, manufacture and market its product candidates.

From time to time, the Company may identify patents or applications in the same general area as its products and product candidates. The Company may determine these third-party patents are irrelevant to its business based on various factors including its interpretation of the scope of the patent claims and its interpretation of when the patent expires. If the patents are asserted against the Company, however, a court may disagree with the Company's determinations. Further, while the Company may determine that the scope of claims that will issue from a patent application does not present a risk, it is difficult to accurately predict the scope of claims that will issue from a patent application, the Company's determination may be incorrect, and the issuing patent may be asserted against the Company. The Company cannot guarantee that it will be able to successfully settle or otherwise resolve such infringement claims. If the Company fails in any such dispute, in addition to being forced to pay monetary damages, it may be temporarily or permanently prohibited from commercializing certain product candidates. The Company might also be forced to redesign its product candidates so that it no longer infringes the third-party intellectual property rights, if such redesign is even possible. Any of these events, even if the Company were ultimately to prevail, could require it to divert substantial financial and management resources that it would otherwise be able to devote to its business.

The Company may be involved in lawsuits to protect or enforce its patents or other intellectual property or the intellectual property of its licensors, which could be expensive, time-consuming, and unsuccessful.

Competitors may infringe the Company's patents or other intellectual property or the intellectual property of its licensors. To cease such infringement or unauthorized use, the Company may be required to file patent infringement claims, which can be expensive and time-consuming and divert the time and attention of the Company's management and scientific personnel. The Company's pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues therefrom. In addition, in an infringement proceeding or a declaratory judgment action, a court may decide that one or more of the Company's patents is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that the Company's patents do not cover the technology in question. An adverse result in any litigation or defense proceeding could put one or more of the Company's patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put the Company's patent applications at risk of not issuing. Defense of these claims, regardless of their merit, may involve substantial litigation expense and may be a substantial diversion of employee resources from the Company's business.

Interference or derivation proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to, or the correct inventorship of, the Company's patents or patent applications. An unfavorable outcome could result in a loss of the Company's current patent rights and could require the Company to cease using the related technology or to attempt to license rights to it from the prevailing party. The Company's business could be harmed if the prevailing party does not offer it a license on commercially reasonable terms. Litigation, interference, derivation or other proceedings may result in a decision adverse to the Company's interests and, even if the Company is successful, may result in substantial costs and distract the Company's management and other employees.

Even if the Company establishes infringement, a court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of the Company's confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of the Company's common stock.

Changes in patent laws or patent jurisprudence could diminish the value of patents in general, thereby impairing the Company's ability to protect its product candidates.

The Company's success is heavily dependent on intellectual property, particularly patents, and obtaining and enforcing patents in its industry involves both technological and legal complexity. Changes in either the patent laws or interpretation of the patent laws in the U.S. and other countries may diminish the value of the Company's patents or narrow the scope of its patent protection.

For example, the AIA, which was passed in September 2011, resulted in significant changes to the U.S. patent system. Pursuant to the AIA, the U.S. transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO after that date but before the Company could therefore be awarded a patent covering an invention of the Company's even if the Company made the invention before it was made by the third party. This requires the Company to be cognizant going forward of the time from invention to filing of a patent application.

The AIA also introduced changes that provide opportunities for third parties to challenge any issued patent with the USPTO. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Such changes could increase the uncertainties and costs surrounding the prosecution of the Company's patent applications and the enforcement or defense of its issued patents.

In addition, the laws of other countries may not protect the Company's rights to the same extent as the laws of the U.S. The complexity and uncertainty of European patent laws has increased in recent years, and the European patent system is relatively stringent in the type of amendments that are allowed during prosecution. Complying with these laws and regulations could limit the Company's ability to obtain new patents in the future that may be important for its business.

The Company enjoys only limited geographical protection with respect to certain patents, and it may not be able to protect its intellectual property rights throughout the world.

Filing, prosecuting and defending patents covering the Company's product candidates in all countries throughout the world would be prohibitively expensive and time-consuming with diminishing marginal returns. Competitors may use the Company's technologies in jurisdictions where it has not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where the Company has patent protection, but enforcement is not as strong as that in the U.S. or the European Union. These products may compete with the Company's product candidates, and its patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Although the Company intends to seek protection of its intellectual property rights in its expected significant markets, the Company cannot ensure that it will be able to initiate or maintain similar efforts in all jurisdictions in which the Company may wish to market its product candidates. The Company may also decide to abandon national and regional patent applications before grant. The grant proceeding of each national or regional patent is an independent proceeding, which may lead to situations in which applications might in some jurisdictions be refused by the relevant patent offices, while granted by others.

The legal systems of certain countries do not favor the enforcement of patents, trade secrets and other intellectual property protection, which could make it difficult for the Company to stop the infringement of its patents or marketing of competing products in violation of the Company's proprietary rights generally. Proceedings to enforce its patent rights in other jurisdictions, whether or not successful, could result in substantial costs and divert its efforts and attention from other aspects of the Company's business, could put the Company's patents at risk of being invalidated or interpreted narrowly and its patent applications at risk of not issuing, and could provoke third parties to assert claims against the Company. The Company may not prevail in any lawsuits that it initiates, and the damages or other remedies awarded, if any, may not be commercially meaningful.

Some countries also have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, some countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If the Company is forced to grant a license to any third parties with respect to any patents relevant to the Company's business, its competitive position may be impaired.

The lives of the Company's patents may not be sufficient to effectively protect the Company's products and business.

Patents have a limited lifespan. For example, in the U.S., if all maintenance fees are paid timely, the natural expiration of a patent is generally 20 years after its first effective filing date. Although various extensions may be available, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such product candidates are commercialized. Even if patents covering the Company's product candidates are obtained, once the patent life has expired for a product, the Company may be open to competition from biosimilar or generic medications. The launch of a generic version of one of the Company's products, in particular, would be likely to result in an immediate and substantial reduction in the demand for that product, which could have a material adverse effect on the Company's business, financial condition, results of operations and prospects. As a result, the Company's patent portfolio may not provide it with sufficient rights to exclude others from commercializing product candidates similar or identical to the Company's product candidates. In addition, although upon issuance in the U.S. a patent's life can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. A patent term extension based on regulatory delay may be available in the U.S. However, only a single patent can be extended for each marketing approval, and any patent can be extended only once, for a single product. Moreover, the scope of protection during the period of the patent term extension does not extend to the full scope of the claim, but instead only to the scope of the product as approved. Laws governing analogous patent term extensions in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, the Company may not receive an extension if the Company fail to exercise due diligence during the testing phase or regulatory review process, apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. If the Company is unable to obtain patent term extension or restoration, or the term of any such extension is less than the Company requests, the period during which the Company will have the right to exclusively market the Company's product will be shortened and the Company's competitors may obtain approval of competing products following the Company's patent expiration and may take advantage of the Company's investment in development and clinical trials by referencing the Company's clinical and preclinical data to launch their product earlier than might otherwise be the case, and the Company's revenue could be reduced, possibly materially. If the Company does not have sufficient patent life to protect the Company's products, the Company's business and results of operations will be adversely affected.

Intellectual property discovered or developed through government funded programs may be subject to federal regulations such as “march-in” rights, certain reporting requirements and a manufacturing preference for U.S.-based companies. Compliance with such regulations may limit the Company’s exclusive rights and limit its ability to contract with non-U.S. manufacturers.

The Company received the NIA Grant to support its ongoing RewinD-LB Trial. Pursuant to the Bayh-Dole Act, the U.S. government may have certain rights in any invention developed or reduced to practice with this funding. In addition, in the future the Company may discover, develop, acquire, or license intellectual property that has been generated through the use of U.S. government funding or grants in which the U.S. government may have certain rights pursuant to the Bayh-Dole Act. These U.S. government rights include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right, under certain limited circumstances, to require the Company to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a third party if it determines that: (1) adequate steps have not been taken to commercialize the invention; (2) government action is necessary to meet public health or safety needs; or (3) government action is necessary to meet requirements for public use under federal regulations (also referred to as “march-in rights”). Such “march-in” rights would apply to new subject matter arising from the use of such government funding or grants and would not extend to pre-existing subject matter or subject matter arising from funds unrelated to the government funding or grants. If the U.S. government exercises its march-in rights in the Company’s intellectual property rights that are generated through the use of U.S. government funding or grants, the Company could be required to license or sublicense intellectual property discovered or developed by it or that it licenses on terms unfavorable to the Company, and there can be no assurance that the Company would receive compensation from the U.S. government for the exercise of such rights. The U.S. government also has the right to take title to these inventions if the grant recipient fails to disclose the invention to the government or fails to file an application to register the intellectual property within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require the Company to expend substantial resources. Should any of these events occur, it could significantly harm the Company’s business, results of operations and prospects. In addition, the U.S. government requires that, in certain circumstances, any products embodying any of these inventions or produced through the use of any of these inventions be manufactured substantially in the U.S. This preference for U.S. industry may be waived by the federal agency that provided the funding if the owner or assignee of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U.S. or that under the circumstances domestic manufacture is not commercially feasible. This preference for U.S. industry may limit the Company’s ability to contract with non-U.S. product manufacturers for products covered by such intellectual property.

The Company’s reliance on third parties requires the Company to share its trade secrets, which increases the possibility that its trade secrets will be misappropriated or disclosed, and confidentiality agreements with employees and third parties may not adequately prevent disclosure of trade secrets and protect other proprietary information.

The Company may rely on trade secrets or confidential know-how to protect various aspects of its business, especially where patent protection is believed by the Company to be of limited value. Due to its reliance on third parties in various aspects of its business, including CMC, R&D and collaborations, the Company must, at times, share trade secrets with such parties. The Company may also conduct joint research and development programs that require it to share trade secrets under the terms of the Company’s research and development partnerships or similar agreements. Such trade secrets or confidential know-how can be difficult to protect as confidential.

To protect this type of information against disclosure or appropriation by competitors, the Company’s policy is to require its employees, consultants, contractors and advisors to enter into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with the Company prior to beginning research or disclosing proprietary information. However, current or former employees, consultants, contractors and advisors may unintentionally or willfully disclose the Company’s confidential information to competitors, and confidentiality agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. Enforcing a claim that a third party obtained illegally and is using trade secrets or confidential know-how is expensive, time-consuming and unpredictable. In addition, the enforceability of confidentiality agreements may vary from jurisdiction to jurisdiction.

Despite the Company’s efforts to protect its trade secrets, the Company’s competitors may discover the Company’s trade secrets, either through breach of the Company’s agreements with third parties, independent development or publication of information by any of its third-party collaborators. A competitor’s discovery of the Company’s trade secrets could impair its competitive position and have an adverse impact on its business.

Intellectual property rights do not necessarily address all potential threats to the Company's competitive advantage.

The degree of future protection afforded by the Company's intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect the Company's business or permit the Company to maintain its competitive advantage. For example:

- others may be able to make product candidates that are similar to ours but that are not covered by the claims of the patents that the Company owns or has exclusively licensed;
- others may independently develop similar or alternative technologies or duplicate any of the Company's technologies without infringing the Company's intellectual property rights;
- it is possible that the Company's pending patent applications will not lead to issued patents;
- the Company may not develop additional proprietary technologies that are patentable;
- the Company may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property;
- the Company may fail to adequately protect and police the Company's trademarks and trade secrets; and
- the patents of others may have an adverse effect on the Company's business, including if others obtain patents claiming subject matter similar to or improving that covered by the Company's patents and patent applications.

Should any of these events occur, they could significantly harm the Company's business, results of operations and prospects.

Obtaining and maintaining the Company's patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and the Company's patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. Although an inadvertent lapse can, in many cases, be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents. In any such event, the Company's competitors might be able to enter the market, which would have a material adverse effect on the Company's business.

Risks Related to Commercialization

The Company has no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for its future viability.

The Company has not yet demonstrated, either on its own or through collaboration with third parties, an ability to successfully complete a large-scale, pivotal clinical trial, obtain marketing approval, manufacture a commercial product, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, predictions about its future success or viability may not be as accurate as they may be if the Company had a longer operating history or a history of successfully developing and commercializing pharmaceutical products.

In addition, as a business with a limited operating history, the Company may encounter unforeseen expenses, complications, delays and other known and unknown factors. If it is able to successfully develop neflamapimod, the Company may eventually need to transition from a company with a research focus to a company capable of supporting commercial activities. The Company may not be successful in such a transition and, as a result, its business may be adversely affected.

As the Company continues to build its business, the Company expects that its financial condition and operating results may fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond its control. Accordingly, investors should not rely upon the results of any particular quarterly or annual period as indications of the Company's future operating performance.

The Company's business operations are subject to applicable healthcare laws and regulations. If neflamapimod is approved, the Company will also be subject to stringent regulation and ongoing regulatory obligations and restrictions, which could delay its marketing and commercialization activities and also expose it to penalties if the Company fails to comply with applicable regulations.

Although the Company does not currently have any products on the market, once it begins commercializing neflamapimod or any other future product candidates, it will be subject to additional healthcare statutory and regulatory requirements and oversight by federal and state governments as well as foreign governments in the jurisdictions in which the Company conducts its business. Physicians, other healthcare providers and third party payors will play a primary role in the recommendation, prescription and use of any product candidates for which the Company obtains marketing approval. The Company's future arrangements with such third parties may expose the Company to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which it markets, sells and distributes any products for which the Company obtains marketing approval. Among others, restrictions under applicable domestic and foreign healthcare laws and regulations include:

- the U.S. federal AKS, which prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;
- U.S. federal false claims, false statements and civil monetary penalties laws, including the U.S. federal False Claims Act, which impose criminal and civil penalties against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- HIPAA, which imposes (i) criminal and civil liability for executing a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services and (ii) obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- analogous state and foreign laws and regulations relating to healthcare fraud and abuse, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers;
- the U.S. federal "Physician Payments Sunshine Act", which requires manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program to report to CMS information related to physician payments and other transfers of value to physicians, certain advanced non-physician health care practitioners, and teaching hospitals, as well as the ownership and investment interests of physicians and their immediate family members;
- analogous state and foreign laws that require pharmaceutical companies to track, report and disclose to the government or the public information related to payments, gifts, and other transfers of value or remuneration to physicians and other healthcare providers, marketing activities or expenditures, or product pricing or transparency information, or that require pharmaceutical companies to implement compliance programs that meet certain standards or to restrict or limit interactions between pharmaceutical manufacturers and members of the healthcare industry;
- U.S. federal laws that require pharmaceutical manufacturers to report certain calculated product prices to the government or provide certain discounts or rebates to government authorities or private entities, often as a condition of reimbursement under federal healthcare programs; and
- state and foreign laws that govern the privacy and security of health information in certain circumstances, including state security breach notification laws, state health information privacy laws and federal and state consumer protection laws, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Ensuring business arrangements comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert a company's attention from the business. Efforts to ensure that the Company's business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of health care reform, including due to lack of applicable precedent and regulations. Any action against the Company for violation of these laws, even if the Company successfully defends against it, could cause the Company to incur significant legal expenses and divert its management's attention from the operation of its business. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance or reporting requirements increases the possibility that a health care company may run afoul of one or more of the requirements. If the FDA or a comparable foreign regulatory authority approves any of the Company's product candidates, the Company will be subject to an expanded number of these laws and regulations and will need to expend resources to develop and implement policies and processes to promote ongoing compliance. It is possible that governmental authorities will conclude that the Company's business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations, resulting in government enforcement actions.

If the Company's operations are found to be in violation of any of these laws or any other governmental regulations that may apply to the Company, it may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from federal healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of the Company's operations. If any of the physicians or other healthcare providers or entities with whom the Company expects to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from federal healthcare programs.

Even if neflamapimod or any other product candidate the Company develops receives marketing approval, it may fail to achieve the level of acceptance necessary for commercial success.

If neflamapimod, or any other product candidate the Company may develop or acquire in the future, receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, health care professionals, patients, third-party payors and others in the medical community. If the Company's drug does not achieve an adequate level of acceptance, the Company may not generate significant product revenues or become profitable. The degree of market acceptance will depend on a number of factors, including but not limited to:

- the ability to provide acceptable evidence of efficacy and potential advantages compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the Company's ability to offer its drug for sale at competitive prices, which may be subject to regulatory control;
- the availability of third-party insurance coverage and adequate reimbursement;
- the availability of alternative treatments and the cost of a new treatment in relation to those alternatives, including any similar generic treatments;
- the relative convenience and ease of administration of a new treatment compared to alternatives, and the prevalence and severity of any side effects of a new treatment;
- the strength and effectiveness of the Company's sales, marketing and distribution capabilities, either internally or in collaboration with others;
- any restrictions on the use of the Company's product together with other medications; and
- any restrictions on the distribution of the Company's product such as those imposed under a mandatory REMS program.

If neflamapimod or any other product candidate that the Company may develop in the future does not provide a treatment regimen that is at least as beneficial as the current standard of care or otherwise does not provide some additional patient benefit over the current standard of care, that product will not achieve market acceptance, and the Company will not generate sufficient revenues to achieve profitability. Because the Company expects sales of its product candidates, if approved, to generate substantially all of its revenues for the foreseeable future, the failure of the Company's product candidates to find market acceptance would materially harm its business.

If the market opportunity for any product candidate that the Company develops is smaller than it believes, its revenue may be adversely affected and its business may suffer.

The Company intends to initially focus its product candidate development on treatments for various CNS and neurodegenerative indications, in particular DLB. The addressable patient populations that may benefit from treatment with the Company's product candidates, if approved, are based on its estimates. These estimates, which have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations and market research, may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these CNS and neurodegenerative diseases. Any regulatory approval of the Company's product candidates would be limited to the therapeutic indications examined in the Company's clinical trials and as determined by the FDA, which would not permit the Company to market its products for any other therapeutic indications not expressly reviewed and approved as safe and effective. Additionally, the potentially addressable patient population for the Company's product candidates may not ultimately be amenable to treatment with the Company's product candidates. Even if the Company receives regulatory approval for any of its product candidates, such approval could be conditioned upon label restrictions that materially limit the addressable patient population. The Company's market opportunity may also be limited by future competitor treatments that enter the market. If any of the Company's estimates prove to be inaccurate, the market opportunity for any product candidate that the Company or its strategic partners develop could be significantly diminished and have an adverse material impact on its business.

The Company faces substantial competition from other biotechnology and pharmaceutical companies, and its operating results will suffer if it fails to compete effectively.

The biotechnology and pharmaceutical industries are highly competitive and subject to significant and rapid technological change. If neflamapimod is approved, it will face intense competition from a variety of businesses, including large, fully integrated pharmaceutical companies, specialty pharmaceutical companies, biopharmaceutical companies in the U.S. and other jurisdictions, academic institutions and governmental agencies and public and private research institutions. These organizations may have significantly greater resources than the Company does. They may also conduct similar research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing and marketing of products that may compete with neflamapimod.

Currently, there are a limited number of companies and disease modifying approaches for DLB. However, given the potential market opportunity for the treatment of DLB and other neurodegenerative diseases, an increasing number of established pharmaceutical firms and smaller biotechnology/biopharmaceutical companies are pursuing a range of potential therapies for these diseases in various stages of clinical development. In addition to these current and potential competitors, the Company anticipates that more companies will enter the DLB market in the future. The Company's potential competitors could have significantly greater financial resources, as well as drug development, manufacturing, marketing, and sales expertise. They may also be able to develop and commercialize products that are safer, more effective, less expensive, more convenient, easier to administer, or have fewer severe effects, than existing treatments or, if it is ultimately approved, neflamapimod. Competitors may also obtain FDA or other regulatory approval for their product candidates more rapidly than the Company may obtain approval for neflamapimod, which could result in their establishing or strengthening a commercial position before the Company is able to enter the market. The highly competitive nature of the biotechnology and pharmaceutical industries, as well as the rapid technological changes in those fields, could limit The Company's ability to advance neflamapimod commercially. If the Company is unable to compete effectively, this could have a material adverse effect on its business and results of operations.

The successful commercialization of neflamapimod, or any other product candidate the Company may develop or acquire, will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage, reimbursement levels, and pricing policies. Enacted and future healthcare legislation may increase the difficulty and cost for the Company to obtain marketing approval of and commercialize its product candidates, if approved, and also affect the prices it may set. Failure to obtain or maintain coverage and adequate reimbursement for the Company's product candidates, if approved, could limit its ability to market those products and decrease its ability to generate revenue.

There have been, and the Company expects will continue to be, a number of legislative and regulatory proposals and changes to the healthcare systems in the U.S. and other jurisdictions that could affect the Company's future results of operations. In particular, a number of initiatives at the U.S. federal and state levels have aimed to reduce healthcare costs and improve the quality of healthcare. Existing regulatory policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of neflamapimod or any future product candidates the Company may develop or acquire. The Company cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U.S. or abroad. If the Company is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if it is not able to maintain regulatory compliance, the Company may lose any marketing approval that it may have obtained, and it may not achieve or sustain profitability.

In the U.S., the availability and adequacy of coverage and reimbursement by governmental healthcare programs such as Medicare and Medicaid, private health insurers, and other third-party payors are essential for most patients to be able to afford prescription medications such as neflamapimod, if it is approved. The Company's ability to achieve acceptable levels of coverage, payment, and reimbursement for products by governmental authorities, private health insurers and other organizations will have an effect on the Company's ability to successfully commercialize neflamapimod and any other potential future product candidates. Assuming the Company obtains coverage for neflamapimod by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. The Company cannot be sure that coverage, payment, and reimbursement in the U.S. or elsewhere will be available for or any drug product that the Company may develop, and any reimbursement that may become available may be decreased or eliminated in the future.

There have recently been and may continue to be a number of significant legislative initiatives in the U.S. to contain healthcare costs. Federal and state governments continue to propose and pass legislation designed to reform delivery of, or payment for, healthcare, which include initiatives to reduce the cost of healthcare. For example, in March 2010, the U.S. Congress enacted the ACA, which substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry. We expect that future changes or additions to the ACA, the Medicare and Medicaid programs, and changes stemming from other healthcare reform measures, especially with regard to healthcare access, financing or other legislation in individual states, could have a material adverse effect on the healthcare industry in the United States.

In August 2022, President Biden signed into law the IRA, which, among other things, requires manufacturers of certain drugs to engage in price negotiations with Medicare (beginning in 2026), with prices that can be negotiated subject to a cap; imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023); and replaces the Part D coverage gap discount program with a new discounting program (beginning in 2025). The IRA permits the Secretary of the Department of Health and Human Services to implement many of these provisions through guidance, as opposed to regulation, for the initial years. In addition, multiple large pharmaceutical companies and other stakeholders (e.g., the U.S. Chamber of Commerce) have initiated federal lawsuits against CMS arguing the program is unconstitutional for a variety of reasons, among other complaints. For these and other reasons, the implementation of the IRA and its impact on the Company's business is currently unclear.

At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures. In December 2020, the U.S. Supreme Court held unanimously that federal law does not preempt the states' ability to regulate PBMs and other members of the health care and pharmaceutical supply chain, an important decision that may lead to appears to be leading to further and more aggressive efforts by states in this area. The Federal Trade Commission in mid-2022 also launched sweeping investigations into the practices of the PBM industry, and members of Congress continue to propose reforms for the PBM industry, all or each of which could lead to additional federal and state legislative or regulatory proposals targeting such entities' operations, pharmacy networks, or financial arrangements. In addition, in the last few years, several states have formed PDABs with the authority to implement UPLs on drugs sold in their respective jurisdictions. There are several pending federal lawsuits challenging the authority of states to impose UPLs, however.

Further, if neflamapimod is approved in any jurisdictions outside of the U.S., the Company may also be subject to extensive governmental price controls and other market regulations in those countries. Governments outside of the U.S., particularly the countries of the European Union, tend to impose strict price controls on prescription pharmaceutical products. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, the Company may be required to conduct a clinical trial that compares the cost-effectiveness of its product candidate to other available therapies. If reimbursement of the Company's products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, the Company's business could be harmed, possibly materially. As a result, the Company might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay its commercial launch of the product and negatively impact the revenue the Company is able to generate from the sale of the product in that country. Adverse pricing limitations may hinder the Company's ability to recoup its investment in its product candidates, even after obtaining regulatory approval.

The Company cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative action in the U.S. or any other jurisdiction. In the U.S., future laws and regulation may result in more rigorous coverage criteria and increased downward pressure on the price pharmaceutical companies may receive for any approved product. Reductions in reimbursement from Medicare or other government programs may result in similar reductions in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent the Company from being able to generate revenue, attain profitability or commercialize its product candidates. Further, if the Company or any third parties with whom it engages in the future are slow or unable to adapt to changes in existing requirements or policies, or if the Company is not able to maintain regulatory compliance, its ability to generate revenue, attain profitability, or commercialize neflamapimod or any other products for which it receives regulatory approval may be materially and adversely affected.

If the Company is unable to obtain adequate coverage and payment levels for its products from third-party payors, physicians may limit how much or under what circumstances they will prescribe or administer them, and patients may decline to purchase them. This in turn would affect the Company's ability to successfully commercialize any approved products and thereby adversely impact its profitability, results of operations, and financial condition.

If the Company is unable to establish sales, marketing and distribution capabilities either on its own or in collaboration with third parties, it may not be successful in commercializing neflamapimod, if approved.

The Company does not currently have any infrastructure for the sales, marketing or distribution of an approved drug product, and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market and successfully commercialize neflamapimod, if approved, the Company must build its sales, distribution, marketing, managerial and other non-technical capabilities, or make arrangements with third parties to perform these services.

There are significant expenses and risks involved in establishing the Company's own sales, marketing and distribution functions, including the Company's ability to hire, retain and appropriately incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Alternatively, to the extent that the Company depends on third parties for such services, any revenues it receives will depend upon the efforts of those third parties, and there can be no assurance that such efforts will be successful.

If the Company is unable to establish adequate sales, marketing and distribution capabilities, either on its own or in collaboration with others, the Company will not be successful in commercializing neflamapimod, if it is ultimately approved, and it may never become profitable. The Company will be competing with companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, the Company may be unable to compete successfully against these more established companies.

Consumers may sue the Company for product liability, which could result in substantial liabilities that exceed its available resources and damage its reputation.

Researching, developing, and commercializing drug products entail significant product liability risks. The use of neflamapimod or any other product candidates the Company may develop in clinical trials and the sale of any products for which it obtains marketing approval exposes it to the risk of product liability claims. Product liability claims might be brought against the Company by clinical trial participants, patients, healthcare providers, pharmaceutical distributors or others selling or otherwise coming into contact with its product candidates or future commercial products. The Company has obtained limited product liability insurance coverage for its clinical trials, which the Company believes to be reasonable given its current operations. However, the Company's insurance coverage may not reimburse the Company or may not be sufficient to reimburse it for any expenses or losses it may suffer.

Although the Company currently has limited product liability insurance that covers its clinical trials, it will need to increase and expand this coverage as it commences larger scale trials, as well as if neflamapimod is ultimately approved for commercial sale. This insurance may be extremely expensive or may not fully cover the Company's potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of neflamapimod, if it is approved. Product liability claims could have a material adverse effect on the Company's business and results of operations.

Any product candidate for which the Company obtains marketing approval will be subject to extensive post-marketing regulatory requirements and could be subject to post-marketing restrictions or withdrawal from the market, and the Company may be subject to penalties if it fails to comply with regulatory requirements or if it experiences unanticipated problems with its products, when and if any of them are approved.

If the FDA or a comparable foreign regulatory authority approves neflamapimod or any of the Company's future product candidates for marketing, activities such as the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. The FDA or a comparable foreign regulatory authority may also impose requirements for costly post-marketing nonclinical studies or clinical trials (often called "Phase 4 trials") and post-marketing surveillance to monitor the safety or efficacy of the product. If the Company or a regulatory authority discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, production problems or issues with the facility where the product is manufactured or processed, such as product contamination or significant not-compliance with applicable cGMPs, a regulator may impose restrictions on that product, the manufacturing facility or the Company. If the Company or its third party providers, including the Company's CMOs, fail to comply fully with applicable regulations, then the Company may be required to initiate a recall or withdrawal of its products.

The Company must also comply with requirements concerning advertising and promotion for any of its product candidates for which it obtains marketing approval. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, the Company will not be able to promote any products it develops for indications or uses for which they are not approved. The FDA and other agencies closely oversee the post-approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding use of their products, and if the Company promotes its products beyond their approved indications, it may be subject to enforcement actions or prosecution arising from that off-label promotion. Violations of the FDCA relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws. Accordingly, to the extent the Company receives marketing approval for neflamapimod, the Company and its CMOs and other third-party partners will continue to expend time, money and effort in all areas of regulatory compliance, including promotional and labeling compliance, manufacturing, production, product surveillance, and quality control. If the Company is not able to comply with post-approval regulatory requirements, it could have marketing approval for any of its products withdrawn by regulatory authorities and its ability to market any future products could be limited, which could adversely affect its ability to achieve or sustain profitability. Thus, the cost of compliance with post-approval regulations may have a negative effect on the Company's operating results and financial condition.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay marketing approval of the Company's product candidates. If the Company is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if it is not able to maintain regulatory compliance, it may lose any marketing approval that it may have obtained, which would adversely affect the Company's business, prospects and ability to achieve or sustain profitability.

Risks Related to Ownership of the Company's Securities

The Company's stock price may be volatile, there may be limited liquidity in the trading market for the Company's common stock, and the market price of its common stock may drop in the future.

The market price of the Company's common stock may be subject to significant fluctuations. Market prices for securities of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been volatile. Some of the factors that may cause the market price of the Company's common stock to fluctuate include among others:

- the ability of the Company or its partners to develop product candidates and conduct clinical trials that demonstrate such product candidates are safe and effective;
- the ability of the Company or its partners to obtain regulatory approvals for product candidates, and delays or failures to obtain such approvals;
- failure of any of the Company's product candidates to demonstrate safety and efficacy, receive regulatory approval and achieve commercial success;
- failure by the Company to maintain its existing third-party license, manufacturing and supply agreements;
- failure by the Company or its licensors to prosecute, maintain, or enforce its intellectual property rights;
- changes in laws or regulations applicable to the Company's product candidates;
- any inability to obtain adequate supply of product candidates or the inability to do so at acceptable prices;
- adverse regulatory authority decisions;
- introduction of new or competing products by the Company's competitors;
- failure to meet or exceed financial and development projections the Company may provide to the public;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures, or capital commitments by the Company or its competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and the Company's ability to obtain intellectual property protection for its technologies;
- additions or departures of key personnel;
- significant lawsuits, including intellectual property or stockholder litigation;
- if securities or industry analysts do not publish research or reports about the Company, or if they issue an adverse or misleading opinions regarding its business and stock;
- changes in the market valuations of similar companies;
- general market or macroeconomic conditions;
- sales of its common stock by the Company or its stockholders in the future;
- the trading volume of the Company's common stock;
- the limited percentage of the Company's outstanding shares that are currently freely tradeable as a result of the significant holdings of the Company's directors and officers;
- adverse publicity relating to the Company's markets generally, including with respect to other products and potential products in such markets;
- changes in the structure of health care payment systems; and
- period-to-period fluctuations in the Company's financial results.

Accordingly, the market price of Company's common stock may be highly volatile and could fluctuate widely in price as a result of these or other factors. In particular, the Company has relatively few shares of common stock outstanding in the "public float" as a higher percentage of the Company's outstanding shares are held by a small number of shareholders. In addition, the shares of common stock may be sporadically or thinly traded. As a consequence of this lack of liquidity, the trading of relatively small quantities of shares by shareholders may disproportionately influence the price of those shares in either direction, particularly over short periods of time. The price for such shares could, for example, decline precipitously in the event that a large number of the shares are sold on the market without commensurate demand, as compared to a seasoned issuer which could better absorb those sales without a material reduction in share price. An active trading market for the Company's shares of common stock may never develop or be sustained. If an active market for its common stock does not develop or is not sustained, it may be difficult for its stockholders to sell their shares at an attractive price or at all.

Additionally, in the past, plaintiffs have often initiated securities class action litigation against a company following periods of volatility in the market price of its securities. The Company may in the future be the target of similar litigation if its stock continues to experience price volatility. Securities litigation could result in substantial costs and liabilities and could divert management's attention and resources.

The Company has funded its operations to date through the issuance of securities, including common stock, warrants to purchase common stock (including pre-funded warrants), convertible preferred stock, and convertible debt securities, and expects that in the future it will need to raise additional capital through similar means to fund its continued operations and liquidity needs. Assuming funding is available on acceptable terms, any future issuance of common stock or securities convertible for or exchangeable into common stock will result in dilution to the Company's existing stockholders and could depress the market price of its common stock. Furthermore, the terms of future financing transactions may contain provisions that restrict our operations or require us to relinquish certain rights to our product candidates or other technologies.

The Company will likely need to raise additional funds in the future to continue its operations, fund research and development, and, if approved, commercialize its product candidates. The Company currently plans to continue to finance operations with a combination of equity issuances, debt arrangements, and, potentially, licensing, or other partnering relationships. The Board may determine at any time to raise additional capital if it believes the terms are in the best interests of the Company's stockholders. In addition, the Company may also issue securities to counterparties as part of an acquisition, merger, or similar transaction, including as part of our strategic review process.

Any issuance or sale of shares, or the perception in the market of an intent to issue or sell shares in the near-term, by the Company or holders of a large number of shares could reduce the market price of the Company's common stock, including in connection with the 2024 Private Placement which is expected to close on or about April 1, 2024, subject to customary closing conditions. The Company also cannot assure you that any such sale of common stock or other securities will be at a price per share that is equal to or greater than the price per share paid by you for the Company's common stock. Furthermore, a depressed stock price could limit the Company's ability to raise necessary capital through the sale of additional equity securities on terms that are acceptable.

In addition, in connection with the 2024 Private Placement, the Company issued the Series A Warrants pursuant to which the holders thereof are entitled to purchase an aggregate of 2,532,285 shares of common stock at an exercise price equal to \$39.24 per share. The Series A Warrants are exercisable immediately and will expire at the earlier of (i) April 1, 2027 or (ii) 180 days after the date that the Company makes a public announcement of positive top-line data from the RewinD-LB Trial, subject to certain beneficial ownership limitations and other conditions set forth therein. Any future issuance of common stock upon exercise of the Series A Warrants will result in dilution to the Company's existing stockholders and could depress the market price of its common stock.

The Company may become obligated to pay liquidated damages if we fail to file, obtain effectiveness and maintain effectiveness of a registration statement in accordance with the terms of the securities purchase agreement related to its 2024 Private Placement.

In connection with the 2024 Private Placement, the Company granted the purchasers of securities in the offering certain resale registration rights pursuant to the terms of the securities purchase agreement. In addition to the registration rights, the purchaser may be entitled to receive liquidated damages upon the occurrence, or failure to occur, of a number of events relating to the filing, effectiveness and maintenance of effectiveness of a registration statement related to the common stock sold in the 2024 Private Placement. The liquidated damages will be payable upon the occurrence, or failure to occur, of each of those events and each monthly anniversary thereof until cured. The amount of liquidated damages payable per monthly period would be equal to 1% of the aggregate purchase price paid by the purchaser, provided, however, the maximum aggregate liquidated damages payable to the purchaser would be 5% of the aggregate amount paid by such purchaser for the purchaser of such securities in the 2024 Private Placement.

Ownership of the Company's common stock is highly concentrated among its officers and directors, which may prevent the Company's stockholders from influencing significant corporate decisions and may result in perceived conflicts of interest that could cause the Company stock price to decline.

As of March 26, 2024, executive officers and directors of the Company owned, directly or indirectly, approximately 47.4% of the outstanding shares of the Company common stock. Accordingly, these stockholders, in the aggregate, may exercise substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of the Company assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of the Company, even if such a change of control would benefit the other stockholders of the Company. The significant concentration of stock ownership may adversely affect the trading price of the Company's common stock due to investors' perception that conflicts of interest may exist or arise.

Future sales of shares by existing stockholders could cause the Company's stock price to decline.

If existing stockholders of the Company sell, or indicate an intention to sell, substantial amounts of the Company's common stock in the public market after certain legal and contractual restrictions on resale lapse, the trading price of the common stock of the Company could decline.

If equity research analysts do not publish research or reports, or publish unfavorable research or reports, about the Company, its business, or its market, its stock price and trading volume could decline.

The trading market for the Company's common stock will be influenced by the research and reports that equity research analysts may publish about it and its business from time to time. Equity research analysts may elect not to provide or continue research coverage of the Company's common stock, which may adversely affect the market price of the stock. In the event the Company does have equity research analyst coverage at any given time,

the Company will not have any control over the analysts, or the content and opinions included in their reports. The price of the Company's common stock could decline if one or more equity research analysts downgrade its stock or issue other unfavorable commentary or research. If one or more equity research analysts cease coverage of the Company or fails to publish reports on the Company regularly, demand for the Company's common stock could decrease, which in turn could cause its stock price or trading volume to decline.

If the Company cannot continue to satisfy the Nasdaq Capital Market continued listing standards and other Nasdaq rules, its common stock could be delisted, which could harm the Company's business, the trading price of its common stock, the Company's ability to raise additional capital and the liquidity of the market for its common stock.

The Company's common stock is currently listed on the Nasdaq Capital Market. To maintain this listing, the Company is required to meet certain listing requirements related to, among other things, the trading price of the Company's common stock, the Company's market capitalization and certain corporate governance-related requirements. In the event the Company's common stock is delisted from Nasdaq for a failure to meet such requirements and is not eligible for quotation or listing on another market or exchange, trading of the Company's common stock could be conducted only in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult for the Company to raise capital and for the Company's stockholders to dispose of, or obtain accurate price quotations for, the Company's common stock. There would likely also be a decline in the liquidity of the trading market for the Company's common stock and a reduction in the Company's coverage by securities analysts and the news media, which could cause the price of the Company's common stock to decline further.

Provisions in the Company's corporate charter documents and under Delaware law could make an acquisition of the Company, which may be beneficial to the Company's stockholders, more difficult and may prevent attempts by the Company's stockholders to replace or remove its current directors and members of management.

Provisions in the Company's certificate of incorporation, as amended, and its amended and restated bylaws may discourage, delay or prevent a merger, acquisition or other change in control of the Company that stockholders may consider favorable, including transactions in which the Company's stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors are willing to pay in the future for shares of the Company's common stock, thereby depressing the market price of its common stock. In addition, because the Board is responsible for appointing the members of its management team, these provisions may frustrate or prevent any attempts by the Company's stockholders to replace or remove its current management by making it more difficult for stockholders to replace members of the Board. Among other things, these provisions:

- allow the authorized number of the Company's directors to be changed only by resolution of the Board;
- limit the manner in which stockholders can remove directors from the Board;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to the Board;
- limit who may call stockholder meetings and the Company stockholders' ability to act by written consent;
- authorize the Board to issue preferred stock without stockholder approval, which could be used to institute a "poison pill" that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by the Board; and
- require the approval of the holders of at least 2/3 of the votes that all the Company's stockholders would be entitled to cast to amend or repeal specified provisions of the Company's certificate of incorporation, as amended, or for stockholders to amend or repeal the Company's amended and restated bylaws.

Moreover, because the Company is incorporated in Delaware, it is governed by the provisions of Section 203 of the DGCL, which generally prohibits a person who, together with their affiliates and associates, owns 15% or more of a company's outstanding voting stock from, among other things, merging or combining with the company for a period of three years after the date of the transaction in which the person acquired ownership of 15% or more of the company's outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

The Company's certificate of incorporation designates the state courts in the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by its stockholders, which could discourage lawsuits against the company and its directors, officers and employees.

The Company's certificate of incorporation provides that, unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for certain proceedings, including: (1) any derivative action or proceeding brought on the Company's behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of the Company's directors, officers, employees or stockholders to the company or its stockholders, (3) any action asserting a claim arising pursuant to any provision of the DGCL or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware or (4) any action asserting a claim arising pursuant to any provision of the Company's certificate of incorporation or amended and restated bylaws (in each case, as they may be amended from time to time) or governed by the internal affairs doctrine. These choice of forum provisions will not apply to suits brought to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which federal courts have exclusive jurisdiction.

These exclusive-forum provisions may make it more expensive for Company stockholders to bring a claim than if the stockholders were permitted to select another jurisdiction, and may limit the ability of the Company's stockholders to bring a claim in a judicial forum that such stockholders find favorable for disputes with the Company or its directors, officers or employees, which may discourage such lawsuits against the Company and its directors, officers and employees. Alternatively, if a court were to find the choice of forum provisions contained in the Company's certificate of incorporation to be inapplicable or unenforceable in an action, the Company may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect its business, financial condition and operating results.

The Company does not anticipate that it will pay any cash dividends in the foreseeable future.

The Company's current expectation is that it will retain future earnings, if any, to fund the development and growth of the Company's business. As a result, capital appreciation, if any, will be your sole source of potential gain on an investment in the Company's common stock for the foreseeable future.

General Risks Related to the Company's Business and Operations

The Company's future success depends in large part on the Company's ability to retain its key employees, as well as its ability to attract, train and motivate additional qualified personnel. The Company may also encounter difficulties in managing its growth, which could disrupt its operations.

The Company has a small number of employees, and it is highly dependent on the principal members of its management team, including its President and Chief Executive Officer, John Alam, M.D. Although the Company has employment agreements or offer letters with its executive officers and certain key employees, these agreements do not prevent them from terminating their services at any time.

Competition in the biotechnology industry for skilled and experienced employees is intense, particularly in the greater Boston, Massachusetts area, where the Company's headquarters is located, and the Philadelphia, Pennsylvania area, where approximately 50% of the employee's workforce is located. The Company also faces competition for the hiring of scientific and clinical personnel from universities and research institutions, many of which are near the Company's headquarters. The loss of the services of any member of the Company's senior management, clinical development or scientific staff, or any other key employee, may significantly delay or prevent the achievement of drug development and other business objectives and could have a material adverse effect on the Company's business, operating results and financial condition.

The Company also relies on consultants and advisors to assist it in formulating and executing its business strategy. Many of the Company's consultants and advisors are either self-employed or employed by other organizations, and they may have conflicts of interest or other commitments, such as consulting or advisory contracts with other organizations, which may affect their ability to contribute to the Company.

As the Company continues to develop neflamapimod for the treatment of DLB, and also to expand into clinical trials for other CNS disorders, the Company expects to experience significant growth in the number of employees and the scope of its operations. This strategy will require it to recruit additional clinical development, regulatory, scientific, and technical personnel, as well as sales and marketing personnel if neflamapimod is approved. If the Company is unable to attract, retain and motivate a sufficient number of highly qualified personnel to match such growth, its ability to further develop and commercialize neflamapimod, or any future product candidates the Company may develop or acquire, will be limited.

The Company may also be required to implement and improve managerial, operational and financial systems to manage its potential growth. Due to its limited financial and personnel resources, the Company may not be able to effectively manage the expansion of its operations or recruit and train a sufficient number of additional qualified personnel. The expansion of the Company's operations may lead to significant costs and may divert its management and business development resources. Any inability to manage growth could delay the execution of the Company's business plans or disrupt its operations.

The Company has identified material weaknesses in its internal control over financial reporting which, if not corrected, could affect the reliability of the Company's financial statements and have other adverse consequences. The Company may identify additional material weaknesses in its internal controls over financial reporting which it may not be able to remedy in a timely manner. If the Company fails to maintain proper and effective internal controls, its ability to produce accurate financial statements on a timely basis could be impaired.

The Company is subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, and the rules and regulations of Nasdaq. The Sarbanes-Oxley Act requires, among other things, that the Company maintain effective disclosure controls and procedures and internal control over financial reporting. The Company must perform system and process evaluation and testing of its internal control over financial reporting to allow management to report on the effectiveness of its internal controls over financial reporting in its Annual Report on Form 10-K filing for that year, as required by Section 404 of the Sarbanes-Oxley Act. This requires that the Company incur substantial professional fees and internal costs to expand its accounting and finance functions and that it expends significant management efforts. The Company may experience difficulty in meeting these reporting requirements in a timely manner.

A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the Company's consolidated financial statements would not be prevented or detected on a timely basis. The identified material weaknesses, if not corrected, could result in a material misstatement to the Company's consolidated financial statements that may not be prevented or detected. The Company may discover weaknesses in its system of internal financial and accounting controls and procedures that could result in a material misstatement of its financial statements.

For example, in connection with the audit of the Company's financial statements for the years ended December 31, 2023 and 2022, material weaknesses in the Company's internal control over financial reporting were identified related to (i) the Company's recording of significant complex transactions, and (ii) the absence of effective controls regarding the accurate identification, evaluation and proper recording of various expense accounts. The Company may identify additional material weaknesses in its internal controls over financial reporting in the future which it may not be able to remedy in a timely manner. Any material weaknesses will not be considered remediated until a remediation plan has been fully implemented, the applicable controls operate for a sufficient period of time, and it has been concluded, through testing, that the newly implemented and enhanced controls are operating effectively.

If the Company is not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, or if it is unable to maintain proper and effective internal controls, the Company may not be able to produce timely and accurate financial statements. If that were to happen, the market price of its common stock could decline and it could be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities. More generally, any failure by the Company to implement and maintain effective internal control over financial reporting could result in errors in the Company's financial statements that could result in a restatement of the Company's financial statements and could cause the Company to fail to meet its reporting obligations, any of which could diminish investor confidence in the Company and cause a decline in the price of the Company's common stock.

The Company's disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

The Company is subject to the periodic reporting requirements of the Exchange Act and its disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by the Company in reports it files or submits under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. The Company believes that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

The Company's information technology systems, or those of its vendors, collaborators or other contractors or consultants, may fail or suffer security incidents, loss of data and other disruptions, which could result in a material disruption of its product development programs, compromise sensitive information related to its business or prevent it from accessing critical information, potentially exposing it to liability or otherwise adversely affecting its business.

In the ordinary course of the Company's business, the Company collects and stores sensitive data, intellectual property, and proprietary business information. This data encompasses a wide variety of business-critical information including research and development information, clinical trial information, commercial information, and business and financial information. The Company faces risks relative to protecting this critical information including loss of access, unauthorized disclosure, unauthorized modification, and inadequate monitoring of its controls over these risks.

Despite the implementation of security measures, the Company's internal IT systems and those of its current and any future third-party vendors, collaborators and other contractors or consultants are vulnerable to system failures, accidents, security incidents, damage, interruption or data theft from computer viruses, computer hackers, malicious code, employee theft or misuse, ransomware, social engineering (including phishing attacks), denial-of-service attacks, sophisticated nation-state and nation-state-supported actors, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. As use of digital technologies has increased, cyber incidents, including deliberate attacks and attempts to gain unauthorized access to computer systems and networks, have increased in frequency and sophistication. These threats pose a risk to the security of the Company's IT systems and networks and the confidentiality, availability and integrity of the Company's data. There can be no assurance that the Company will be successful in preventing cybersecurity incidents or successfully mitigating their effects.

Any such disruption or security incident could cause interruptions to its operations and result in disruption of the Company's development programs and business operations. For example, the loss of clinical trial data from future clinical trials could result in delays in the Company's regulatory approval efforts and significantly increase its costs to recover or reproduce the data. If the Company were to experience a significant cybersecurity incident that impacts its information systems or data, the costs associated with the investigation, remediation, and potential notification of the cybersecurity incident to counterparties, regulatory authorities, and data subjects could be material. In addition, the Company's remediation efforts may not be successful. Cybersecurity incidents could also lead to significant business disruption, including transaction errors, supply chain or manufacturing interruptions, processing inefficiencies, data loss or the loss of or damage to intellectual property or other proprietary information. In addition, the Company's recently-increased remote workforce could increase the Company's cybersecurity risk, create data accessibility concerns, and make the Company more susceptible to communication disruption.

To the extent that any disruption or cybersecurity incident were to result in a loss of, or damage to, the Company's or its third-party vendors', collaborators' or other contractors' or consultants' data or applications, or inappropriate disclosure of confidential or proprietary information, the Company could incur liability including litigation exposure, penalties and fines, the Company could become the subject of regulatory actions or investigations, its competitive position could be harmed and the further development and commercialization of its product candidates could be delayed. Any of the above could have a material adverse effect on the Company's business, financial condition, reputation, competitive advantage, results of operations or prospects. While the Company maintains cyber-liability insurance, such insurance may not be adequate to cover any losses experienced as a result of a cybersecurity incident.

The Company's business may be affected from time-to-time by government investigations and litigation with third parties, including its ongoing matter with Paul Feller.

The Company may from time to time receive inquiries and subpoenas and other types of information requests from government authorities and other third parties and may become subject to claims and other actions related to its business activities. While the ultimate outcome of investigations, inquiries, information requests and legal proceedings is difficult to predict, defense of litigation claims (even if ultimately successful) can be expensive, time-consuming and distracting, and adverse resolutions or settlements of those matters may result in, among other things, modifications to business practices, costs and significant payments, any of which could have a material adverse effect on the Company's business, financial condition, results of operations and prospects.

For example, in August 2014, Paul Feller, the former Chief Executive Officer of the Company's legal predecessor, filed a complaint asserting various causes of action related to his past affiliations with the Company's legal predecessor. While the Company believes it has meritorious defense to the claims alleged in this matter and is defending itself vigorously, the Company is unable to predict the outcome and possible loss or range of loss, if any, associated with its resolution or any potential effect the matter may have on the Company's financial position. Depending on the outcome or resolution of this matter, it could have a material effect on the Company's consolidated financial position, results of operations and cash flows.

Now that the Merger has closed, there can be no further recourse by either party or its stockholders for a breach of representation or warranty by any of the parties to the Merger Agreement.

The representations and warranties of Diffusion, EIP and Merger Sub contained in the Merger Agreement or any certificate or instrument delivered pursuant to the Merger Agreement terminated at the Effective Time. To the extent that any such party's breach of any representations and warranties is discovered or occurs in the future, there is no mechanism pursuant to which the other parties can pursue recourse or remedy.

The Company's business is, or may in the future become, subject to complex and evolving U.S. and foreign laws and regulations relating to privacy and data protection. These laws and regulations are subject to change and uncertain interpretation, and the Company's actual or perceived failure to comply with such obligations could result in liability or reputational harm and could harm its business.

A wide variety of provincial, state, national, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer and other processing of personal data. These data protection and privacy-related laws and regulations are evolving and may result in increased regulatory and public scrutiny and escalating levels of enforcement and sanctions. In the U.S., numerous federal and state laws and regulations, including state data breach notification laws, state health information privacy laws and federal and state consumer protection laws govern the collection, use, disclosure and protection of health-related and other personal information. Failure to comply with data protection laws and regulations, where applicable, could result in government enforcement actions, which could include civil or criminal penalties, private litigation and/or adverse publicity and could negatively affect our operating results and business. For example, California has enacted the CCPA, which went into effect in January of 2020. The CCPA gives California residents expanded rights to access and require deletion of their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that may increase data breach litigation. Although the CCPA includes exemptions for certain clinical trials data, and HIPAA protected health information, the law may increase the Company's compliance costs and potential liability with respect to other personal information the Company collects and processes about California residents. Additionally in 2020, California voters passed the CPRA, which went into full effect on January 1, 2023. The CPRA significantly amends the CCPA, potentially resulting in further uncertainty, additional costs related to our compliance efforts and additional potential for harm and liability if we fail to comply. Among other things, the CPRA established a new regulatory authority, the California Privacy Protection Agency, which is tasked with enacting new regulations under the CPRA and will have expanded enforcement authority. In addition to California, more U.S. states are enacting similar legislation, increasing compliance complexity and increasing risks of failures to comply. In 2023, comprehensive privacy laws in Virginia, Colorado, Connecticut, and Utah all took effect, and laws in Montana, Oregon, and Texas will take effect in 2024. In addition, laws in other U.S. states are set to take effect beyond 2024, and additional U.S. states have proposals under consideration, all of which could increase the Company's regulatory compliance costs and risks, exposure to regulatory enforcement action and other liabilities.

Numerous other countries have, or are developing, laws governing the collection, use and transmission of personal information as well. For example, the European Parliament and the Council of the European Union adopted a comprehensive general data privacy framework called the GDPR which became fully effective in May 2018 and governs the collection and use of personal data in the European Union, including by companies outside of the European Union. The GDPR also imposes strict rules on the transfer of personal data out of the European Union to the United States. The GDPR imposes stringent data protection requirements and provides for penalties for noncompliance of up to the greater of €20 million or four percent of worldwide annual revenues. The GDPR and many other laws and regulations relating to privacy and data protection are still being tested in courts, and they are subject to new and differing interpretations by courts and regulatory officials. The Company may be required to devote significant additional resources to complying with these laws and regulations, and it is possible that the GDPR or other laws and regulations relating to privacy and data protection may be interpreted and applied in a manner that is inconsistent from jurisdiction to jurisdiction or inconsistent with the Company's current policies and practices.

Applicable data privacy and data protection laws may conflict with each other, and by complying with the laws or regulations of one jurisdiction, the Company may find that it is violating the laws or regulations of another jurisdiction. Despite the Company's efforts, the Company may not have fully complied in the past and may not in the future. That could require the Company to incur significant expenses, which could significantly affect its business. Failure to comply with data protection laws or to protect personal data or other data the Company processes or maintains may expose the Company to risk of enforcement actions taken by data protection authorities or other regulatory agencies, private rights of action in some jurisdictions, potential significant fines, penalties and other liabilities if it is found to be non-compliant, and damage to the Company's reputation, any of which could materially affect its business, financial condition, results of operations and prospects. Furthermore, the number of government investigations related to data security incidents and privacy violations continue to increase and government investigations typically require significant resources and generate negative publicity, which could harm the Company's business and reputation.

Past or future transactions resulting in an ownership change under Section 382 of the Code may subject the Company's NOL carryforwards and certain other tax attributes to limitation.

As of December 31, 2023, the Company had U.S. federal NOL carryforwards of approximately \$38.9 million. Under Sections 382 and 383 of the Code and corresponding provisions of state law, if a corporation undergoes an "ownership change" (within the meaning of Section 382), the corporation's NOL carryforwards and certain other tax attributes (such as research tax credits) arising before the ownership change are subject to limitation on use after the ownership change. In general, an ownership change occurs if there is a cumulative change in the corporation's equity ownership by certain stockholders that exceeds fifty percentage points (by value) over a rolling three-year period. Similar rules may apply under state tax laws. Past or future transactions to which the Company is a party may, alone or in the aggregate, result in such an ownership change and, accordingly, the Company's NOL carryforwards and certain other tax attributes may be subject to limitations (or disallowance) on their use in the future. Consequently, even if the Company achieves profitability, it may not be able to utilize a material portion of its NOL carryforwards and other tax attributes, which could have a material adverse effect on cash flow and results of operations. There is also a risk that due to regulatory changes, such as suspensions on the use of NOLs or other unforeseen reasons, the Company's existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities.

The Company incurs costs and demands upon management as a result of complying with the laws, rules and regulations affecting public companies.

The Company incurs significant legal, accounting and other expenses associated with public company reporting requirements. The Company also incurs costs associated with corporate governance requirements, including requirements under the laws, rules and regulations of the SEC, as well as the rules and regulations of Nasdaq. These laws, rules and regulations also may make it difficult and expensive for the Company to obtain directors' and officers' liability insurance. As a result, it may be more difficult for the Company to attract and retain qualified individuals to serve on the Company's Board or as executive officers of the Company, which may adversely affect investor confidence in the Company and could cause the Company's business or stock price to suffer.

The Company may fail to comply with evolving privacy and data protection laws, which could adversely affect the Company's business, results of operations and financial condition.

In California, the CCPA, which became effective in 2020, broadly defines personal information, gives California residents expanded individual privacy rights and protections and provides for civil penalties for violations and a private right of action for data breaches. Further, the CPRA, which became effective in 2023 and amends the CCPA, creates additional obligations with respect to processing and storing personal information. While there is limited exception for protected health information that is subject to HIPAA and clinical trial regulations, the CCPA may regulate or impact our processing of personal information depending on the context. Unlike other state privacy laws, the CCPA also regulates personal information collected in a business to business and in human resources contexts. Further, there continues to be some uncertainty about how provisions of the CCPA and the new regulations will be interpreted and how the law will be enforced. In addition to the CCPA, broad consumer privacy laws recently went into effect in Virginia on January 1, 2023, in Colorado and Connecticut on July 1, 2023, and in Utah on December 31, 2023. New privacy laws will also become effective in Florida, Montana and Texas in 2024, in Tennessee and Iowa in 2025, and in Indiana in 2026 and numerous other states are considering new privacy laws. Furthermore, other U.S. states, such as New York, Massachusetts, and Utah have enacted stringent data security laws and numerous other states have proposed similar privacy laws. The existence of differing comprehensive privacy laws in different states in the country will make the Company's compliance obligations more complex and costly and may require us to modify the Company's data processing practices and policies and to incur substantial costs and potential liability in an effort to comply with such legislation.

In the European Union and the United Kingdom, the Company may also face particular privacy, data security, and data protection risks in connection with requirements of the GDPR. The GDPR applies to any company established in the European Union as well as to those outside the European Union if they collect and use personal data in connection with the offering of goods or services to individuals in the European Union or the monitoring of their behavior. The GDPR imposes a broad range of data protection obligations on companies subject to the GDPR, including, for example, imposing obligations on companies around how they process personal data, stricter requirements relating to processing health and other sensitive data, ensuring there is a legal basis to justify the processing of personal data, stricter requirements relating to obtaining consent of individuals, expanded disclosures about how personal information is to be used, limitations on retention of information, mandatory data breach notification requirements, implementing safeguards to protect the security and confidentiality of personal data, taking certain measures on engagement with third parties, restrictions on transfers outside of the European Union to third countries deemed to lack adequate privacy protections, and has created onerous new obligations and liabilities on services providers or data processors. Non-compliance with the GDPR may result in monetary penalties of up to €20 million or 4% of worldwide revenue, whichever is higher. Moreover, data subjects can claim damages resulting from infringement of the GDPR. The GDPR further grants non-profit organizations the right to bring claims on behalf of data subjects. The GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of personal data, such as healthcare data or other sensitive information, could greatly increase the Company's cost of providing the Company's products and services or even prevent us from offering certain services in jurisdictions that the Company may operate in. The GDPR may increase the Company's responsibility and liability in relation to personal data that the Company processes where such processing is subject to the GDPR, and the Company may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Ensuring the Company's continued compliance with the GDPR is a rigorous and time-intensive process that may increase the Company's cost of doing business or require us to change the Company's business practices, and despite those efforts, there is a risk that the Company may be subject to fines and penalties, litigation, and reputational harm in connection with the Company's European activities. Many jurisdictions outside of U.S. and Europe are also considering and/or enacting comprehensive data protection legislation that could have an impact on market expansion and clinical trials as well.

On July 10, 2023, the European Commission adopted an adequacy decision for a new mechanism for transferring data from the European Union to the United States – the EU-U.S. Data Privacy Framework, which provides European Union individuals with several new rights, including the right to obtain access to their data, or obtain correction or deletion of incorrect or unlawfully handled data. The adequacy decision followed the signing of an executive order introducing new binding safeguards to address the perceived deficiencies in the protection of EU-U.S. data transfers raised in the *Maximilian Schrems vs. Facebook* (Case C-311/18) decision by the Court of Justice of the European Union. The European Commission will continually review developments in the United States along with its adequacy decision. Adequacy decisions can be adapted or even withdrawn in the event of developments affecting the level of protection in the applicable jurisdiction. Future actions of EU data protection authorities are difficult to predict. Some customers or other service providers may respond to these evolving laws and regulations by asking us to make certain privacy or data-related contractual commitments that we are unable or unwilling to make. This could lead to the loss of current or prospective customers or other business relationships.

Because the interpretation and application of many privacy and data protection laws (including those state laws in the U.S. and the GDPR), commercial frameworks, and standards are uncertain, it is possible that these laws, frameworks, and standards may be interpreted and applied in a manner that is inconsistent with the Company's existing data management practices and policies. If so, in addition to the possibility of fines, lawsuits, breach of contract claims, and other claims and penalties, the Company could be required to fundamentally change the Company's business activities and practices or modify the Company's solutions, which could have an adverse effect on the Company's business. Any inability to adequately address privacy and security concerns, even if unfounded, or comply with applicable privacy and security or data security laws, regulations, and policies, could result in additional cost and liability to us, damage the Company's reputation, inhibit the Company's ability to conduct trials, and adversely affect the Company's business.

The Company's business and operations could suffer in the event of system failures, cyberattacks, or deficiency in the Company's cyber security.

The Company relies on information technology systems and networks, including third-party "cloud-based" service providers, and the Company's third-party CROs, to process, transmit and store electronic information in connection with the Company's business activities. This includes crucial systems such as email, other communication tools, electronic document repositories, and archives. As use of digital technologies has increased, cyber incidents, including deliberate attacks and attempts to gain unauthorized access to computer systems and networks, have increased in frequency and sophistication. These threats pose a risk to the security of the Company's systems and networks and the confidentiality, availability and integrity of the Company's data. Cyberattacks could include wrongful conduct by hostile foreign governments, industrial espionage, wire fraud and other forms of cyber fraud, the deployment of harmful malware, denial-of-service, social engineering fraud or other means to threaten data security, confidentiality, integrity and availability. Furthermore, because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, the Company may be unable to anticipate these techniques or implement adequate preventative measures. The Company may also experience security breaches that may remain undetected for an extended period. A successful cyberattack could cause serious negative consequences for us, including, without limitation, the disruption of operations, the misappropriation of confidential business information, including financial information, trade secrets, financial loss and the disclosure of corporate strategic plans. As of the date of this Annual Report, there have been no cybersecurity incidents that have materially affected or are reasonably likely to materially affect the Company's business strategy, results of operations, or financial condition. However, there can be no assurance that the Company will be successful in preventing cyber-attacks or successfully mitigating their effects.

The Company's business activities may be subject to the FCPA and similar anti-bribery and anti-corruption laws.

The Company's business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which the Company operates, including the U.K. Bribery Act. The FCPA generally prohibits offering, promising, giving, or authorizing others to give anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action, or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. The Company's business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, the health care providers who prescribe pharmaceuticals are employed by their government, and the purchasers of pharmaceuticals are government entities; therefore, any Company dealings with these prescribers and purchasers are subject to regulation under the FCPA. The SEC and U.S. Department of Justice have recently increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies. There is no certainty that all the Company's employees, agents, contractors, or collaborators, or those of the Company's affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines, criminal sanctions against the Company, its officers, or its employees, the closing down of facilities, requirements to obtain export licenses, cessation of business activities in sanctioned countries, implementation of compliance programs, and prohibitions on the conduct of its business. Any such violations could include prohibitions on the Company's ability to offer its products in one or more countries and could materially damage the Company's reputation, its brand, future international expansion efforts, its ability to attract and retain employees, and its business, prospects, operating results, and financial condition.

The Company's employees, independent contractors, consultants, vendors and future commercial partners, if any, may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

The Company is exposed to the risk of fraud, misconduct or other illegal activity by its employees, independent contractors, consultants, vendors and other third parties. Misconduct by these parties could include intentional, reckless and negligent conduct that may fail to, among other things: comply with the rules and regulations of the FDA, EMA and other comparable foreign regulatory authorities; provide true, complete and accurate information to such authorities; comply with manufacturing standards the Company has established; comply with healthcare fraud and abuse laws; or report financial information or data accurately or to disclose unauthorized activities to the Company. If the Company obtains FDA approval of any of its product candidates and begins commercializing those products, its potential exposure under such laws will increase significantly, and its costs associated with compliance with such laws are also likely to increase. In particular, research, sales, marketing, education and other business arrangements in the healthcare industry are subject to extensive legal and regulatory requirements designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, educating, marketing and promotion, sales and commission, certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of subject recruitment for clinical trials, which could result in regulatory sanctions and cause serious harm to the Company's reputation. The Company has adopted a code of business conduct and ethics, but it is not always possible to identify and deter misconduct by employees and third parties, and the precautions the Company takes to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting it from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws. If any such actions are instituted against the Company, and the Company is not successful in defending itself or asserting its rights, those actions could have a significant impact on its business, including the imposition of significant fines or other sanctions.

Inadequate funding for the FDA, the SEC and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner, or otherwise prevent those agencies from performing normal business functions on which the operation of the Company's business may rely, which could negatively impact the Company's business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, its ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory, and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the FDA, the NIA, the SEC and other government agencies on which the Company's operations may rely, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for clinical trial applications and/or marketing applications for new drugs to be reviewed or approved, which would adversely affect the Company's business. Over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical staff and stop critical activities. If a prolonged government or slowdown shutdown occurs, it could significantly impact the ability of the NIA to disburse funds for the Company's clinical trial and for the FDA to timely review and process the Company's regulatory submissions, which could have a material adverse effect on the Company's business.

For example, the Company received access to \$7.3 million under the NIA Grant in February 2024, 90% of the full amount of current year funding provided for in the NIA Grant, due to current NIA policy as a result of the U.S. government currently being funded on the basis of a continuing resolution. The timing of the Company's receipt of the remaining 10%, or \$0.8 million, of current year funding is dependent upon and subject to U.S. congressional approval of a final appropriations bill.

Future government shutdowns or slowdowns could also result in delays in the Company's interactions with the SEC and other government agencies, which could impact the Company's ability to access the public markets and obtain necessary capital in order to properly capitalize and continue its operations.

U.S. federal income tax reform or other changes in applicable tax law could adversely affect the Company's business and financial condition.

The rules dealing with U.S. federal, state, and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service, the U.S. Treasury Department and other governmental bodies. In recent years, many such changes have been made and may continue to occur in the future. For example, in March 2020, the CARES Act was signed into law, which included certain changes in tax law intended to stimulate the U.S. economy in response to the COVID-19 coronavirus outbreak, including temporary beneficial changes to the treatment of net operating losses, interest deductibility limitations and payroll tax matters. Additionally, in December 2017, the TCJA was signed into law, which significantly reformed the Code. The TCJA included significant changes to corporate and individual taxation, some of which could adversely impact an investment in the Company's common stock. For example, under the TCJA, in general, NOLs generated in taxable years beginning after December 31, 2017 may offset no more than 80 percent of such year's taxable income and there is no ability for such NOLs to be carried back to a prior taxable year. The CARES Act modified the TCJA with respect to the TCJA's limitation on the deduction of NOLs and provided that NOLs arising in taxable years beginning after December 31, 2017 and before January 1, 2021 may be carried back to each of the five taxable years preceding the tax year of such loss, but NOLs arising in taxable years beginning after December 31, 2020 may not be carried back. In addition, the CARES Act eliminated the limitation on the deduction of NOLs to 80 percent of current year taxable income for taxable years beginning before January 1, 2021 (but reinstated the limitation for taxable years beginning after December 31, 2020). As a result of such limitations, the Company may be required to pay federal income tax in some future year notwithstanding that it had a net loss for all years in the aggregate.

More generally, recent and future changes in tax laws could have a material adverse effect on the Company's business, cash flow, financial condition or results of operations.

The Company faces risks associated with increased geopolitical uncertainty.

Ongoing and potential military actions across the globe, including the ongoing conflicts in Ukraine and the Middle East, as well as the sanctions, bans and other measures taken by governments, organizations and companies against the involved countries and certain citizens of those countries in response thereto, has increased the global political uncertainty and has strained the relations between a significant number of governments, including the U.S. The duration and outcome of these conflicts, any retaliatory actions or escalation, and the impact on regional or global economies is unknown but could have a material adverse effect on the Company's business, financial condition and results of its operations.

Unfavorable global economic conditions could adversely affect the Company's business, financial condition or results of operations.

The Company's results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. For example, in 2008, the global financial crisis caused extreme volatility and disruptions in the capital and credit markets and, more recently, the COVID-19 pandemic caused significant volatility and uncertainty in U.S. and international markets. A severe or prolonged economic downturn, or additional global financial crises, could result in a variety of risks to the Company's business, including weakened demand for its product candidates, if approved, or its ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain the Company's suppliers, possibly resulting in supply disruption. Any of the foregoing could harm the Company's business and it cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact its business.

Epidemics, pandemics or other public health crises, including COVID-19, could adversely affect the Company's business.

The Company's operations could be significantly adversely affected by the effects of a widespread outbreak of epidemics, pandemics or other health crises, including COVID-19. The Company cannot accurately predict the impact of epidemics and pandemics would have on our operations and the ability of third parties to meet their obligations under contracts or arrangements with the Company, including uncertainties relating to the ultimate geographic spread of epidemics and pandemics, the severity of the underlying diseases, the duration of outbreaks, and the length of travel and quarantine restrictions imposed by governments of affected countries. In addition, a significant outbreak of contagious diseases in the human population could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn that could further affect the Company's operations and ability to finance the Company's operations.

Political uncertainty may have an adverse impact on the Company's operating performance and results of operations.

General political uncertainty may have an adverse impact on the Company's operating performance and results of operations. In particular, the United States continues to experience significant political events that cast uncertainty on global financial and economic markets, especially in light of the upcoming presidential election. It is presently unclear exactly what actions a new administration in the United States would implement, and if implemented, how these actions may impact the pharmaceutical industry in the United States.

The Company holds its cash and cash equivalents that it uses to meet its working capital needs in deposit accounts that could be adversely affected if the financial institutions holding such funds fail.

The Company holds its cash and cash equivalents that it uses to meet working capital needs in deposit accounts at certain third party financial institutions. The balances held in these accounts may exceed the FDIC, standard deposit insurance limit or similar government guarantee schemes. If a financial institution in which the Company holds such funds fails or is subject to significant adverse conditions in the financial or credit markets, the Company could be subject to a risk of loss of all or a portion of such uninsured funds or be subject to a delay in accessing all or a portion of such uninsured funds. Any such loss or lack of access to these funds could adversely impact the Company's short-term liquidity and ability to meet its obligations.

For example, on March 10, 2023, Silicon Valley Bank, and on March 12, 2023, Signature Bank, were closed by state regulators and the FDIC was appointed receiver for each bank. The FDIC created successor bridge banks and all deposits of Silicon Valley Bank and Signature Bank were transferred to the bridge banks under a systemic risk exception approved by the U.S. Department of the Treasury, the Federal Reserve and the FDIC. While the Company did not hold any of its funds in accounts with either of these institutions, if financial institutions in which the Company holds funds for working capital were to fail, the Company cannot provide any assurances that such governmental agencies would take action to protect its uninsured deposits in a similar manner.

The Company may also, from time to time, maintain investment accounts with other financial institutions in which it holds its investments and, if access to the funds the Company uses for working capital is impaired, the Company may not be able to sell investments or transfer funds from its investment accounts to new accounts on a timely basis sufficient, or without incurring a loss or penalty as a result of such sale, to meet its working capital needs.

Certain stockholders could attempt to influence changes within the Company which could adversely affect the Company's operations, financial condition and the value of its common stock.

One or more of the Company's stockholders may from time to time seek to acquire a significant or controlling stake in the Company, engage in proxy solicitations, advance stockholder proposals or otherwise attempt to effect changes to the Company's Board or corporate governance policies. Campaigns by stockholders to effect changes at publicly traded companies are sometimes led by investors seeking to increase short-term stockholder value through actions such as financial restructuring, increased debt, special dividends, stock repurchases or sales of assets or the entire company. Responding to proxy contests and other actions by activist stockholders can be costly and time-consuming, could disrupt the Company's operations and divert the attention of the Company Board and senior management, and could adversely affect the Company's operations, financial condition, and the value of its common stock.

The Company may not be able to enter into a transaction with a suitable acquiror or licensee for its product candidate TSC or any transaction entered into may not be on terms that are favorable to the Company.

As previously announced, in connection with Diffusion's strategic review process during 2022-23, Diffusion made the decision to voluntarily pause the development program for TSC, Diffusion's lead drug candidate prior to the Merger. Currently, the Company does not intend to pursue the development of TSC and believes the primary path available to derive value from its TSC-related assets would be to find a suitable acquiror or licensee. Although the Company's management has contacted numerous parties to assess their potential interest in such a transaction, to date, the Company has been unable to identify an interested counterparty. Furthermore, even if the Company is able to identify such a counterparty, supporting diligence activities conducted by potential acquirors or licensees and negotiating the financial and other terms of an agreement or license are typically long and complex processes, and the results of such processes cannot be predicted. There can be no assurance that the Company will enter into any transaction as a result of these efforts or that any transaction involving the Company's TSC-related assets will be entered into or, if entered into, will be on terms that are favorable to the Company. Furthermore, the Company cannot predict the impact that such a transaction or, alternatively, a failure to monetize the TSC assets in any material way, might have on its stock price.

Artificial intelligence presents risks and challenges that can impact the Company's business including by posing security risks to confidential information, proprietary information, and personal data.

Issues in the development and use of artificial intelligence, combined with an uncertain regulatory environment, may result in reputational harm, liability, or other adverse consequences to the Company's business operations. The Company may adopt and integrate generative artificial intelligence tools into our systems for specific use cases reviewed by legal and information security. The Company's vendors may incorporate generative artificial intelligence tools into their offerings, and the providers of these generative artificial intelligence tools may not meet existing or rapidly evolving regulatory or industry standards with respect to privacy and data protection and may inhibit the Company's or its vendors' ability to maintain an adequate level of service and experience. If the Company, its vendors, or its third-party partners experience an actual or perceived violation of applicable privacy or data protection laws or regulations, or a cybersecurity incident due to the use of generative artificial intelligence, the Company could be subject to regulatory fines, investigations, enforcement actions, penalties and other liabilities, claims for damages from affected individuals, and the Company may lose valuable intellectual property and confidential information and its reputation and the public perception of the effectiveness of its privacy or cybersecurity measures could be harmed. Any of these outcomes could damage the Company's reputation, result in the loss of valuable property and information, and adversely impact its business.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Cybersecurity Risk Management Program Overview

We recognize the critical role that properly managing cybersecurity risk plays in maintaining the trust and confidence of our stockholders, the patients in our clinical trials, our employees, our business partners and our other stakeholders. Accordingly, our cybersecurity program is designed to identify, assess, manage and mitigate material risks from cybersecurity threats through a variety of measures, including risk assessments, implementation of security measures, and ongoing monitoring of systems and networks. In collaboration with our third-party information technology service providers, a cross-functional team comprised of representatives from our administrative, finance and legal functions actively monitor the current threat landscape in an effort to identify material risks arising from new and evolving cybersecurity threats. We also engage external experts, including information technology experts, other consultants, and auditors to evaluate our cybersecurity measures and risk management processes.

We also identify our cybersecurity threat risks by comparing our processes to industry standards and best practices as well as by engaging experts to manage our information systems. To provide for the availability of critical data and systems, maintain regulatory compliance, manage our material risks from cybersecurity threats, and protect against and respond to cybersecurity incidents, we undertake the following activities:

- monitor emerging data protection laws and implement changes to our processes that are designed to comply with such laws;
- through our policies, practices and contracts (as applicable), require employees, as well as third parties that provide services on our behalf, to treat confidential information and data with care;
- employ technical safeguards that are designed to protect our information systems from cybersecurity threats, which are evaluated and improved through vulnerability assessments and other evaluations on a routine basis;
- provide training for our employees regarding cybersecurity threats as a means to equip them with effective tools to address cybersecurity threats, and to communicate our evolving information security policies, standards, processes and practices;
- leverage threat intelligence available to us and our third party IT service provider to help us identify, protect, detect, respond and recover when there is an actual or potential cybersecurity incident; and
- carry information security risk insurance that provides protection against the potential losses arising from a cybersecurity incident.

Board Oversight of Cybersecurity Risk Management and Governance

Our Board is responsible for general oversight of our risk environment and associated management policies and practices and has delegated to its Audit Committee the responsibility for oversight of our certain major risk categories and exposures, including with respect to cybersecurity and management's processes to monitor and control them. The Audit Committee meets regularly throughout the year and, on no less than a quarterly basis, receives and reviews a report from management, including the Company's General Counsel, regarding the Company's IT, cybersecurity, data security, and physical security risk, including any suspected material or immaterial cybersecurity incidents during the preceding quarter, if any, and discusses such matters with appropriate management and other personnel. In addition, on a semi-annual basis, the Audit Committee receives a report from the Company's primary third-party information technology and cybersecurity regarding the Company's IT environment, overall cybersecurity risk management program and strategy and education regarding emerging trends and threats.

Management's Role in Cybersecurity Risk Management and Governance

Our executive management team is responsible for assessing and managing material risks from cybersecurity threats and possess relevant experience and expertise in various disciplines that are key to effectively managing such risks. The experience and expertise of our executive management team is also supplemented by our external IT service providers that collectively have extensive, broad experience and expertise in these areas. Our executive management team reports information about such risks to the Audit Committee of the Board on at least a quarterly basis.

We depend on and engage various other third parties, including suppliers, vendors, and service providers, to support key elements of our business including our information technology infrastructure. Our processes address cybersecurity threat risks associated with our use of such third-party service providers. In addition, cybersecurity considerations affect the selection and oversight of our third-party service providers. We perform diligence on third parties that have access to our systems, data or facilities that house such systems or data, and continually monitor cybersecurity threat risks identified through such diligence. Our management is informed about and monitors the prevention, detection, mitigation, and remediation of cybersecurity incidents, including through the receipt of notifications from service providers and reliance on communications with risk management, legal, information technology, and/or compliance personnel.

In response to an identified cybersecurity incident, a group comprised of appropriate management personnel, our third-party information technology service provider and, depending on the scope and severity of the incident, additional third-party subject matters experts, will be assembled to develop and implement a response strategy to contain, control, and remediate the cybersecurity incident, including securing our affected systems and/or information, mitigating harmful effects of the incident, preventing further compromises, and communicating information to affected parties, regulatory agencies and law enforcement, as necessary. This group will also report any such cybersecurity incident to the Audit Committee of the Board.

Assessment of Cybersecurity Risk

The potential impact of risks from cybersecurity threats are assessed on an ongoing basis by both management and the Board, including how such risks could materially affect our business strategy, operational results, and financial condition.

As of the date of this Annual Report, we have not experienced a cybersecurity incident that results in a material effect on our business strategy, results of operations or financial condition, but we cannot provide assurance that we will not be materially affected in the future by such an incident or risks related thereto.

We describe whether and how risks from identified cybersecurity threats, including as a result of any previous cybersecurity incidents, have materially affected or are reasonably likely to materially affect us, including our business strategy, results of operations, or financial condition, under the heading Item 1A. Risk Factors – General Risks Related to the Company’s Business and Operations,” which disclosures are incorporated by reference herein.

ITEM 2. PROPERTIES

We currently have a short-term lease for office space in Boston, Massachusetts and, in addition, previously had a short-term agreement to utilize membership-based co-working space in Charlottesville, Virginia, which was terminated in the first quarter of 2024. Rent expense related to the Company’s short-term agreements was approximately \$34,000 and \$45,000 for the years ended December 31, 2023 and 2022, respectively.

We believe the space is adequate to meet our near-term needs.

ITEM 3. LEGAL PROCEEDINGS

The information in *Note 10, Commitments and Contingencies — Legal Proceedings* to our consolidated financial statements included in, *Part II — Item 8 — Financial Statements and Supplementary Data* of this Annual Report is incorporated herein by reference.

In addition, from time to time, we are subject to various pending or threatened legal actions and proceedings, including those that arise in the ordinary course of its business, which may include employment matters, breach of contract disputes and stockholder litigation. Such actions and proceedings are subject to many uncertainties and to outcomes that are not predictable with assurance and that may not be known for extended periods of time. We record a liability in our consolidated financial statements for costs related to claims, including future legal costs, settlements and judgments, when we have assessed that a loss is probable and an amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range, we record the most probable estimate of the loss or the minimum amount when no amount within the range is a better estimate than any other amount. We disclose a contingent liability even if the liability is not probable or the amount is not estimable, or both, if there is a reasonable possibility that a material loss may have been incurred. In the opinion of management, as of the date hereof, the amount of liability, if any, with respect to these matters, individually or in the aggregate, will not materially affect our consolidated results of operations, financial position or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock trades publicly on the Nasdaq Capital Market under the symbol "CRVO."

Holders

As of March 26, 2024, there were 115 record holders of our common stock. This does not include beneficial owners of our common stock whose stock is held in nominee or "street name".

Dividends

To date, we have not declared or paid any cash dividends on our common stock and do not intend to do so in the near future.

Securities Authorized for Issuance Under Equity Compensation Plans

The information set forth in, *Part III — Item 12 (Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters)* of this Annual Report is incorporated herein by reference to the extent required by Item 201(d) of Regulation S-K.

Recent Unregistered Sales of Equity Securities and Use of Proceeds

On March 28, 2024, we entered into a securities purchase agreement with certain purchasers named therein related to the private placement of an aggregate of 2,532,285 units, each comprised of (i) (A) one share of common stock or (B) one Pre-Funded Warrant and (ii) one Series A Warrant. The 2024 Private Placement is expected to close on or about April 1, 2024, subject to customary closing conditions. The aggregate upfront gross proceeds from the 2024 Private Placement are expected to be approximately \$50 million, before deducting offering fees and expenses, and additional gross proceeds of up to approximately \$99.4 million may be received if the Series A Warrants are exercised in full for cash.

The 2024 Private Placement is exempt from the registration requirements of the Securities Act pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(a)(2) of the Securities Act and in reliance on similar exemptions under applicable state laws, as well as in accordance with applicable Nasdaq rules. The purchasers in the 2024 Private Placement represented that they were institutional accredited investors within the meaning of rules promulgated under the Securities Act and were acquiring the securities for investment only and with no present intention of distributing any of such securities or any arrangement or understanding regarding the distribution thereof. The securities were offered without any general solicitation by us or our representatives. The securities sold and issued in the 2024 Private Placement will not be registered under the Securities Act or any state securities laws and may not be offered or sold in the U.S. absent registration with the SEC or an applicable exemption from the registration requirements.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion and analysis contains information related to historical and prospective events intended to enable you to assess our financial condition and results of operations. The information contained in this discussion and analysis should be read in conjunction with our consolidated financial statements and the related notes contained elsewhere in this Annual Report, as well as the risks and uncertainties discussed under the headings, "Item 1A — Risk Factors" and "Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biotechnology company focused on developing treatments for age-related neurologic disorders. We are currently focused on the development of our lead drug candidate, neflamapimod, an investigational, orally administered, small molecule brain penetrant that inhibits p38 α in the neurons (nerve cells) within the brains of people with neurodegenerative diseases. Neflamapimod has the potential to treat and improve synaptic dysfunction, the reversible aspect of the underlying disease processes in DLB and certain other major neurological disorders, and is currently being evaluated in our ongoing RewinD-LB Trial, a Phase 2b study in patients with DLB funded by a \$21.0 million grant from the NIA. We expect to complete enrollment in the RewinD-LB Trial during the second quarter of 2024 and to report initial results from the placebo-controlled portion of the study during the fourth quarter of 2024.

Our novel approach focuses on reducing the impact of inflammation in the brain, or neuroinflammation, which we believe is a key factor in the manifestation of degenerative diseases of the brain, including DLB. Chronic activation of the enzyme p38 α in the neurons (nerve cells) within the brains of people with neurodegenerative diseases is believed to impair how neurons communicate through synapses (the connections between neurons). This impairment, termed synaptic dysfunction, leads to deterioration of cognitive and motor abilities. Left untreated, synaptic dysfunction can result in neuronal loss that leads to devastating disabilities, significant reliance on a caretaker, long term care living, and, ultimately, death. However, before neuronal loss commences, disease progression in major neurodegenerative disorders, including DLB, initially involves a protracted period of functional loss, particularly with respect to the synapses. We believe that inhibiting p38 α activity in the brain, by interfering with key pathogenic drivers of disease, has the potential to reverse the clinical progression observed in early-stage neurodegenerative diseases, and that it is possible to slow further progression by delaying permanent synaptic dysfunction and neuron death.

We believe we are a leader in the industry in developing a treatment for DLB, as we are the only company of which we are aware with an asset that has shown statistically significant improvements compared to placebo in a Phase 2a clinical trial (our AscenD-LB Trial) and has initiated a Phase 2b clinical evaluation (our ongoing RewinD-LB Trial), from which we expect initial results before the end of 2024. The clinical symptoms in DLB are most directly linked to synaptic dysfunction in cholinergic neurons (neurons producing the neurotransmitter acetylcholine) in a part of the brain named the basal forebrain. Based on available preclinical and clinical data, we believe if neflamapimod is given in the early stages of certain degenerative diseases of the brain, it may reverse synaptic dysfunction and improve neuron health and function. In preclinical studies, neflamapimod has been shown to reverse the neurodegenerative process in the BFC system. Following earlier clinical studies demonstrating blood-brain-barrier penetration, target (p38 α) engagement, and identification of dose-response, we obtained positive Phase 2a clinical data in patients with DLB in our AscenD-LB Trial. Specifically, statistically significant improvement was observed in patients treated with neflamapimod compared to patients treated with placebo on measures of dementia severity (as measured by CDR-SB) and functional mobility (i.e., walking ability, as measured by the TUG test) in the primary (intention-to-treat) analysis that includes all patients randomized into the study that had at least one measurement of the endpoint analyzed. In addition, in a secondary analysis, neflamapimod demonstrated statistically significant improvement compared to placebo in a battery of cognitive tests, particularly with respect to tests that measured attention.

In October 2023, the major clinical neurology journal, *Neurology*, published additional analyses of the AscenD-LB Trial data that further strengthened these conclusions regarding neflamapimod's potential efficacy and identified the DLB patient population most responsive to neflamapimod treatment. In these analyses, the results were stratified by pre-treatment levels of plasma ptau181, which recent scientific literature has identified as a biomarker to differentiate DLB patients with AD-associated co-pathology – a form of mixed dementia which we sometimes refer to as “DLB+AD” – from DLB patients without AD-associated co-pathology – which we sometimes refer to as “pure DLB.” In pure DLB patients, who generally represent early-stage patients with limited neurodegeneration in the hippocampus, the treatment response to neflamapimod in the AscenD-LB Trial was substantial (Cohen's *d* effect size ≥ 0.7 and statistically significant vs. placebo on the CDR-SB, TUG, cognitive tests of attention and working memory) and greater than the overall patient population. In a February 2024 publication in the *Journal of Prevention of Alzheimer's Disease*, results from our prior clinical trials of neflamapimod in AD and DLB were integrated to show not only the demonstrated effects of neflamapimod on cognition and function, but on other biomarkers such as EEG and brain volume and functional connectivity in the basal forebrain.

Our ongoing RewinD-LB Trial is a double-blind, placebo-controlled, 16-week Phase 2b study in 160 patients with pure DLB funded by a \$21.0 million grant from the NIA. The trial is intended to confirm the efficacy findings from the AscenD-LB Trial and definitively demonstrate proof-of-concept. We have utilized our subsequent analyses of the AscenD-LB data and the other information described above to optimize the RewinD-LB Trial's design and bolster the trial's statistical power. Critically, the RewinD-LB Trial will exclude patients with Alzheimer's disease related co-pathology as evaluated by plasma ptau181 levels (i.e. the study will only enroll patients with pure DLB) and, to enrich for such patients, the global CDR-SB score at entry will be limited to 0.5 or 1.0. Together with additional modifications to the Phase 2a design related to dosing regimen and primary endpoint, sample size calculations indicate that the RewinD-LB Phase Trial has greater than 95% statistical power (approaching 100%) to meet its primary objective of demonstrating improvement relative to placebo on change in CDR-SB over the course of the study.

We expect to complete enrollment in the RewinD-LB Trial during the second quarter of 2024 and to report initial results from the placebo-controlled portion of the study during the fourth quarter of 2024. The results of the RewinD-LB Trial are intended to provide the data necessary to finalize our design of a Phase 3 clinical trial, the general framework of which, including a 24-week treatment duration, has been agreed upon with the FDA.

In addition to neflamapimod's potential to treat DLB, we believe the benefit of targeting neuroinflammation-induced synaptic dysfunction in the BFC system can be applied to other neurologic indications in which treatment of BFC dysfunction and degeneration would be expected to be clinically beneficial, including as treatment promoting recovery in the three months after ischemic stroke, as a disease-modifying treatment for early-stage Alzheimer's disease, and as a treatment for certain forms of frontotemporal dementia.

Financial Summary

As of December 31, 2023, we had cash and cash equivalents of approximately \$7.8 million. To date, we have not had any products approved for sale and have not generated any revenue from product sales and our ability to do so in the future will depend on the successful development and eventual commercialization of neflamapimod (or another product candidate that we could acquire or develop in the future). We do not expect to generate revenue from product sales until such time, if ever.

Our accumulated deficit as of December 31, 2023 was \$54.4 million. We have never been profitable, and we will continue to require additional capital to develop neflamapimod and fund operations for the foreseeable future. We have historically incurred net losses in each year since inception. Our net loss was \$2.2 million and \$5.8 million in the years ended December 31, 2023 and December 31, 2022, respectively. We expect our expenses will increase in connection with our ongoing activities, as we:

- advance neflamapimod through clinical trials, including our ongoing Phase 2b trial for DLB, through to initiation of a Phase 3 trial in DLB;
- manufacture supplies for our nonclinical studies and clinical trials;
- obtain, maintain, expand, and protect our intellectual property portfolio;
- hire additional personnel to support our operations and growth; and
- continue to operate as a public company.

Based on our current operating plan, we believe that our cash and cash equivalents on hand as of December 31, 2023, along with the remaining funds expected to be received from the NIA Grant, will not be sufficient to allow us to fund our current operations and continue as a going concern through at least one year from the date of the issuance of our consolidated financial statements. We expect to incur substantial expenditures for the foreseeable future for the development of neflamapimod and will require additional financing to continue this development.

On March 28, 2024, we entered into a securities purchase agreement with certain purchasers named therein related to the private placement of an aggregate of 2,532,285 units, each comprised of (i) (A) one share of common stock or (B) one Pre-Funded Warrant and (ii) one Series A Warrant. The aggregate upfront gross proceeds for the 2024 Private Placement are expected to be approximately \$50 million, before deducting offering fees and expenses, and up to an additional approximately \$99.4 million in gross proceeds if the Series A Warrants are fully exercised for cash. The 2024 Private Placement is expected to close on or about April 1, 2024, subject to customary closing conditions. The information contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations, including information regarding our liquidity, capital resources and cash runway, does not reflect the anticipated consummation of, or our anticipated receipt of proceeds from, the 2024 Private Placement. For additional information regarding the 2024 Private Placement, the terms thereof (including the conditions to closing), and our expected use of the net proceeds therefrom, refer to our Current Report on Form 8-K filed with the SEC on March 28, 2024.

Financial Operations Overview

Revenue

To date, we have not generated any revenue from product sales and we do not expect to do so in the near future. In January 2023, we were awarded our \$21.0 million NIA Grant. Funding from the NIA Grant is recognized as grant revenue as the qualifying expenses related thereto are incurred. As of December 31, 2023, \$7.1 million of grant funding was recognized as revenue, of which \$6.2 million has been received and the remaining \$0.9 million has been recorded as grant receivable. As the NIA Grant was initially awarded in January 2023, there was no grant revenue in the year ended December 31, 2022.

Research and Development Expenses

Research and development expenses account for a significant portion of our operating expenses and primarily consist of costs incurred for the discovery and development of our product candidates, including:

- expenses incurred under agreements with CROs, preclinical testing organizations, consultants, and other third-party vendors, collaborators and service providers;
- costs related to production of clinical materials, including fees paid to CMOs;
- vendor expenses related to the execution of preclinical studies and clinical trials;
- personnel-related expenses, including salaries, benefits, and stock-based compensation for personnel engaged in research and development functions;
- costs related to the preparation of regulatory submissions;
- third-party license fees; and
- expenses for rent and other supplies.

We recognize research and development expenses as incurred. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors, collaborators, and third-party service providers. Non-refundable advance payments made by us for future research and development activities are capitalized and expensed as the related goods are delivered and as services are performed.

Specific program expenses include expenses associated with the development of our lead product candidate, neflamapimod, which recently initiated a Phase 2b clinical trial for treatment of subjects with DLB. Personnel or other operating expenses incurred for our research and development programs primarily relate to salaries and benefits, stock-based compensation, and facility expenses.

At this time, we cannot reasonably estimate or know the nature, timing, and estimated costs of the efforts that will be necessary to complete the development of, and obtain regulatory approval for, neflamapimod, or for any other product candidates that we may develop or acquire. We expect our research and development expenses to increase substantially for the foreseeable future as we continue to invest in R&D activities related to developing neflamapimod such as conducting larger clinical trials, seeking regulatory approval and incurring expenses associated with hiring personnel to support other R&D efforts. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming, and the successful development of product candidates, including neflamapimod, is highly uncertain.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel-related costs, including stock-based compensation for our personnel in executive, finance and accounting, and other administrative functions. General and administrative expenses also include legal fees relating to intellectual property and corporate matters, professional fees paid for accounting, auditing, consulting, and tax services, insurance costs, and facility costs.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research and development activities and as we continue development activities pursuant to the NIA Grant. We also anticipate that we will incur increased expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the SEC and those of any national securities exchange on which our securities are traded, legal, auditing, additional insurance expenses, investor relations activities, and other administrative and professional services.

Other Income (Expense)

Other income (expense) consists of interest earned on our cash and cash equivalents and the change in fair value of the previously outstanding EIP Convertible Notes.

Results of Operations

Comparison of the Years Ended December 31, 2023 and 2022

The following table summarizes our results of operations:

	December 31,		\$ Change	% Change
	2023	2022		
Grant revenue	\$ 7,144,872	\$ -	\$ 7,144,872	100%
Operating expenses:				
Research and development	8,438,499	1,336,469	7,102,030	531%
General and administrative	6,519,268	2,139,065	4,380,203	205%
Loss from operations	(7,812,895)	(3,475,534)	(4,337,361)	125%
Other income (expense):				
Other income (expense)	5,421,592	(2,389,152)	7,810,744	-327%
Interest income	219,430	62,226	157,204	253%
Interest expense	-	(587)	587	-100%
Total other income (expense)	5,641,022	(2,327,513)	7,968,535	-342%
Net loss	\$ (2,171,873)	\$ (5,803,047)	\$ 3,631,174	-63%

Grant Revenue

Grant revenue was \$7.1 million for the year ended December 31, 2023 which was a result of services performed during the year ended December 31, 2023 related to the \$21.0 million grant awarded to us by the NIA in January 2023 to support a Phase 2b study of neflamapimod in DLB. At December 31, 2023, we had a receivable of \$0.9 million for expenses incurred but not yet refunded by the NIA. As the NIA Grant was initially awarded in January 2023, there was no grant revenue in 2022.

Research and Development Expenses

Research and development expenses were \$8.4 million for the year ended December 31, 2023, compared to \$1.3 million for the year ended December 31, 2022. The increase of \$7.1 million was primarily due to our DLB Phase 2b trial beginning in the first quarter of 2023 resulting in an increase in outsourced CRO and related site expenses.

General and Administrative Expenses

General and administrative expenses were \$6.5 million for the year ended December 31, 2023, compared to \$2.1 million for the year ended December 31, 2022. The increase of \$4.4 million was primarily due to the Merger and public company related costs. The drivers of the increase were outsourced accounting/audit fees of \$1.3 million, insurance costs of \$1.0 million (including a one-time cost related to the merger of \$0.8 million), headcount costs of \$0.8 million, and investor/public relations costs of \$0.7 million.

Other Income (Expense)

Other income (expense) was \$5.4 million for the year ended December 31, 2023, compared to \$(2.4) million for the year ended December 31, 2022. The amount for the year ended December 31, 2022 was driven by an increase in the estimated fair value of the Convertible Notes while the increase in the year ended December 31, 2023 was driven by the stock price on the date of conversion as a result of the Merger.

Interest income

Interest income was \$0.2 million and \$0.1 million for the years ended December 31, 2023 and 2022, respectively. The increase was primarily due to higher interest earned as a result of an increased cash equivalents balance.

Liquidity and Capital Resources

Capital Requirements

From the date of our inception through December 31, 2023, our operations had primarily been financed through the issuance of common stock, convertible preferred stock and convertible debt financings. As of December 31, 2023, we had approximately \$7.8 million of cash and cash equivalents. We have not generated positive cash flows from operations and as of December 31, 2023, we had an accumulated deficit of approximately \$54.4 million. In January 2023, we were awarded a \$21.0 million grant from the NIA to support the Phase 2b study of neflamapimod in DLB, which is expected to be received over a three-year period. As of December 31, 2023, total cash funding of \$6.2 million had been received from the NIA Grant.

In addition, we are party to our 2022 Sales Agreement with BTIG LLC (“BTIG”). The 2022 Sales Agreement is an "at-the-market" sales agreement pursuant to which we may, from time to time and through BTIG as our agent, sell up to an aggregate of \$20.0 million in shares of common stock by any permissible method deemed an “at the market offering” as defined in Rule 415(a)(4) under the Securities Act. As of the date of this Annual Report, however, we have not sold any shares pursuant to the 2022 Sales Agreement.

On March 28, 2024, we entered into a securities purchase agreement with certain purchasers named therein related to the private placement of an aggregate of 2,532,285 units, each comprised of (i) (A) one share of common stock or (B) one Pre-Funded Warrant and (ii) one Series A Warrant. The 2024 Private Placement is expected to close on or about April 1, 2024, subject to customary closing conditions. The aggregate upfront gross proceeds from the 2024 Private Placement are expected to be approximately \$50 million, before deducting offering fees and expenses, and additional gross proceeds of up to approximately \$99.4 million may be received if the Series A Warrants are exercised in full for cash.

Our primary uses of cash are to fund our operations, which consist primarily of research and development expenditures related to our programs and, to a lesser extent, general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses.

Our losses from operations, negative operating cash flows and accumulated deficit, as well as the additional capital needed to fund operations within one year of the issuance date of our financial statements for the period ended December 31, 2023, raise substantial doubt about our ability to continue as a going concern.

Any product candidates we may develop may never achieve commercialization, and we anticipate that we will continue to incur losses for the foreseeable future. We expect that our research and development expenses, general and administrative expenses, and capital expenditures will continue to increase. In addition, we expect to incur costs associated with operating as a public company. As a result, until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings, debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. Our primary uses of capital are, and we expect will continue to be, costs related to clinical research, manufacturing and development services; compensation and related expenses; costs relating to the build-out of our headquarters, other offices and laboratories; license payments or milestone obligations that may arise; laboratory expenses and costs for related supplies; manufacturing costs; legal and other regulatory expenses and general overhead costs.

Based on our current operating plan, we believe that our existing cash and cash equivalents on hand as of December 31, 2023, along with the remaining funds expected to be received from the NIA Grant (but without giving effect to the expected proceeds from the 2024 Private Placement), are not sufficient to enable us to fund our operating expenses and capital expenditure requirements for at least one year from the date of the issuance of this Annual Report. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. We will continue to require additional financing to advance our current product candidates through clinical development, to develop, acquire or in-license other potential product candidates and to fund operations for the foreseeable future. We will continue to seek funds through equity offerings, debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through a debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any failure to raise capital as and when needed could have a negative impact on our financial condition and on our ability to pursue our business plans and strategies. If we are unable to raise capital, we will need to delay, reduce or terminate planned activities to reduce costs, including our development or commercialization activities for neflamapimod. We might also be required to seek funds through arrangements with third parties that require us to relinquish certain of our rights to neflamapimod or otherwise agree to terms unfavorable to us.

Because of the numerous risks and uncertainties associated with research, development and commercialization of product candidates, we are unable to estimate the exact amount of our operating capital requirements. Our future capital requirements will depend on, and could increase significantly as a result of, many factors, including:

- the enrollment, progress, timing, costs and results of the RewinD-LB Trial, as well as additional development plans for neflamapimod in other disease indications, such as Recovery after Anterior Circulation Ischemic Stroke and FTD;
- the outcome, timing and cost of meeting regulatory requirements established by the FDA and other comparable foreign regulatory authorities;
- our ability to reach certain milestone events set forth in our collaboration agreements and the timing of such achievements, triggering our obligation to make applicable payments;
- the hiring of additional clinical, scientific and commercial personnel to pursue our development plans, as well the increased costs of internal and external resources as to support our operations as a public reporting company;
- the cost and timing of securing manufacturing arrangements for clinical or commercial production;
- the cost of establishing, either internally or in collaboration with others, sales, marketing and distribution capabilities to commercialize neflamapimod, if approved;
- the cost of filing, prosecuting, enforcing, and defending our patent claims and other intellectual property rights, including defending against any patent infringement actions brought by third parties against us;
- the ability to receive additional non-dilutive funding, including grants from organizations and foundations;
- our ability to establish strategic collaborations, licensing or other arrangements with other parties on favorable terms, if at all; and
- the extent to which we may in-license or acquire other product candidates or technologies.

A change in the outcome of any of these or other variables could significantly alter the costs and timing associated with the development of neflamapimod. Furthermore, our operating plans may change in the future, and we may need additional funds to meet operational needs and capital requirements associated with such operating plans.

Cash Flows

	December 31,	
	2023	2022
Net cash used in operating activities	\$ (7,449,847)	\$ (2,572,759)
Net cash provided by financing activities	11,149,114	-
Net increase (decrease) in cash and cash equivalents	\$ 3,699,267	\$ (2,572,759)

Operating Activities

For the year ended December 31, 2023, cash used in operating activities was \$7.4 million. The net cash outflow from operations primarily resulted from net loss of \$2.2 million which included a \$5.4 million non-cash gain due to a change in fair value of convertible debt and changes in operating assets and liabilities of \$0.3 million, offset by a non-cash charge of \$0.4 million for stock-based compensation.

For the year ended December 31, 2022, cash used in operating activities was \$2.6 million. The net cash outflow from operations primarily resulted from net loss of \$5.8 million and change in fair value of convertible debt of \$2.4 million, offset by a non-cash charge of \$0.3 million for stock-based compensation, \$0.1 million of capital in lieu of executive compensation and changes in operating assets and liabilities of \$0.4 million.

Financing Activities

For the year ended December 31, 2023, net cash provided by financing activities was \$11.1 million. The net cash provided by financing activities primarily resulted from the net assets assumed in connection with the reverse recapitalization and sale of common stock offset by the payment of offering costs.

Investing Activities

We did not have any cash provided by or used in investing activities for the years ended December 31, 2023 or 2022.

Contractual Obligations and Other Commitments

We enter into contracts in the normal course of business with third-party contract organizations for clinical trials, nonclinical studies and manufacturing, and other services for operating purposes. The amount and timing of contractual obligations may vary based on the timing of services. We can generally elect to discontinue the work under these agreements at any time. In the future, we could also enter into additional collaborative research, contract research, manufacturing and supplier agreements which may require upfront payments or long-term commitments of cash.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements, as defined by the rules and regulations of the SEC that have or are reasonably likely to have a material effect on our financial condition, changes in financial condition, revenue or expenses, results of operations, liquidity, capital expenditures or capital resources. As a result, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these arrangements.

Critical Accounting Policies and Estimates

Management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions, and any such differences may be material. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates. We believe the following are our more significant estimates and judgments used in the preparation of our financial statements.

Research and Development Costs

Research and development costs are expensed as incurred and consist primarily of new product development. Research and development costs include salaries and benefits, consultants' fees, process development costs and stock-based compensation, as well as fees paid to third parties that conduct certain research and development activities on our behalf.

A substantial portion of our ongoing research and development activities are conducted by third-party service providers. We record accrued expenses for estimated preclinical study and clinical trial expenses. Estimates are based on the services performed pursuant to contracts with research institutions, contract research organizations in connection with clinical studies, investigative sites in connection with clinical studies, vendors in connection with preclinical development activities, and contract manufacturing organizations in connection with the production of materials for clinical trials. Further, we accrue expenses related to clinical trials based on the level of subject enrollment and activity according to the related agreement. We monitor subject enrollment levels and related activity to the extent reasonably possible and make judgments and estimates in determining the accrued balance in each reporting period. Payments for these activities are based on the terms of the individual arrangements, which may differ from the pattern of costs incurred, and are reflected in the financial statements as prepaid or accrued research and development.

If we underestimate or overestimate the level of services performed or the costs of these services, actual expenses could differ from estimates. To date, we have not experienced significant changes in our estimates of preclinical studies and clinical trial accruals.

Stock-based Compensation

Stock-based compensation for employee and non-employee awards is measured on the grant date based on the fair value of the award and recognized on a straight-line basis over the requisite service period. The fair value of stock options to purchase common stock are measured using the Black-Scholes option pricing model. We account for forfeitures as they occur. The fair value of stock options is determined by us using the methods and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment and estimation by management.

Expected Term. The expected term represents the period that stock-based awards are expected to be outstanding. We use the "simplified method" to estimate the expected term of stock option grants. Under this approach, the weighted-average expected life is presumed to be the average of the contractual term of ten years and the weighted-average vesting term of our stock options, taking into consideration multiple vesting tranches. We utilize this method due to lack of historical data and the plain-vanilla nature of our stock-based awards.

Expected Volatility. We have limited information on the volatility of common stock as the shares were not actively traded on any public markets until recently. As such, expected volatility is derived from the historical stock volatilities of comparable peer public companies within our industry. These companies are considered to be comparable to our business over a period equivalent to the expected term of the stock-based awards.

Risk-Free Interest Rate. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the date of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the stock options expected term.

Expected Dividend Rate. The expected dividend is zero as we have not paid, nor do we anticipate paying, any dividends on our stock options in the foreseeable future.

In periods prior to the Merger, the grant date fair value of EIP Common Stock was typically determined by EIP's Board of Directors with the assistance of management and a third party valuation specialist.

For additional information regarding stock-based compensation in periods following the Merger, see Note 12 to the consolidated financial statements included elsewhere in this Annual Report.

Valuation of Convertible Notes

The fair value of the Convertible Notes as of December 31, 2022 were estimated as the combination of a zero-coupon bond and a call option. The combined values for each of the Convertible Notes as of December 31, 2022 were then weighted by the probability of completing a financing or reverse merger. This approach resulted in the classification of the Convertible Notes as of December 31, 2022 as Level 3 of the fair value hierarchy (see Note 9 to the consolidated financial statements included elsewhere in this Annual Report). The assumptions utilized to value the 2020 Notes and the 2021 Notes as of December 31, 2022 were an estimated term of 0.94 years, volatility of 80.0% and a market yield of 55.2%.

In connection with the closing of the Merger, all outstanding EIP Convertible Notes converted into shares of EIP Common Stock at the fixed conversion price of \$1.47 per share of EIP Common Stock, which shares of EIP Common Stock were subsequently converted into the right to receive shares of our CervoMed common stock (or pre-funded warrants in lieu thereof) upon closing of the Merger.

Recently Issued Accounting Pronouncements

The information in *Note 3, Basis of Presentation and Summary of Significant Accounting Policies* to our consolidated financial statements set forth in, "*Part II — Item 8 — Financial Statements*" of this Annual Report is incorporated herein by reference.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

As a "smaller reporting company" (as such term is defined in Rule 12b-2 of the Exchange Act), we are not required to provide the information described in Item 305 of Regulation S-K and, accordingly, the information required by Item 7A of Form 10-K has been omitted from this Annual Report.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of CervoMed Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of CervoMed Inc. and its subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of operations, changes in convertible preferred stock and stockholders' equity (deficit) and cash flows for the years then ended, and the related notes to the consolidated financial statements (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The Company's Ability to Continue as a Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses from operations since inception and will be required to raise additional capital to fund operations. This raises substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters also are described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which they relate.

Accounting for Reverse Recapitalization

As discussed in Note 4 of the accompanying financial statements, on August 16, 2023, EIP Pharma, Inc. ("EIP") merged with Merger Sub, a wholly-owned subsidiary of Diffusion Pharmaceuticals Inc. ("Diffusion"), whereby EIP became the surviving entity and a wholly-owned subsidiary of Diffusion ("the Merger"). Immediately following the Merger, the Company changed its name to CervoMed Inc. ("the Company"). The Merger was accounted for as a reverse recapitalization under the United States generally accepted accounting principles ("U.S. GAAP"), in which EIP was determined to be the accounting acquirer based upon the terms of the Merger and other certain factors.

We identified the accounting for the reverse recapitalization as a critical audit matter because of the complexity in the determination of the proper treatment of the transaction in accordance with U.S. GAAP, including judgments made by management to arrive at the proper conclusion. This required subjective auditor judgment and increased level of effort when performing audit procedures, including the involvement of professionals with specialized skills and knowledge.

Our audit procedures related to the Company's accounting for the reverse recapitalization included the following, among others:

- Obtained the relevant agreements and compared the underlying terms and conditions to management's analysis and supporting documentation.
- With assistance from professionals with specialized skills and knowledge, obtained and evaluated management's analysis and conclusions regarding the accounting treatment of the transaction, including determination of the accounting acquirer and whether the acquiree was considered to be a business.
- Tested the conversion of shares in common stock of the Company, including the conversion of EIP convertible notes and preferred stock and the recalculation of shares issued to Diffusion shareholders.

/s/ RSM US LLP

We have served as the Company's auditor since 2017.

Boston, Massachusetts
March 29, 2024

CervoMed Inc.
Consolidated Balance Sheets

	December 31,	
	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 7,792,846	\$ 4,093,579
Prepaid expenses	1,256,501	64,127
Grant receivable	915,404	-
Total current assets	9,964,751	4,157,706
Other assets	7,770	-
Total assets	\$ 9,972,521	\$ 4,157,706
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	\$ 662,471	\$ 97,302
Accrued expenses and other current liabilities	1,933,276	644,252
Convertible notes	-	12,414,000
Total liabilities	2,595,747	13,155,554
Commitments and Contingencies (Note 10)		
Convertible preferred stock:		
Series A preferred stock \$0.001 par value; 30,000,000 and 0 shares authorized at December 31, 2023 and 2022, respectively, 0 shares issued and outstanding at December 31, 2023 and December 31, 2022	-	-
Series A-1 preferred stock, \$0.001 par value; 0 and 1,960,600 shares authorized at December 31, 2023 and 2022, respectively; 0 and 1,960,600 shares issued and outstanding at December 31, 2023 and December 31, 2022, respectively	-	246,849
Series A-2 preferred stock, \$0.001 par value; 0 and 335,711 shares authorized at December 31, 2023 and 2022, respectively; 0 and 335,711 shares issued and outstanding at December 31, 2023 and December 31, 2022, respectively	-	4,173,267
Series B preferred stock, \$0.001 par value; 0 and 1,034,890 shares authorized at December 31, 2023 and 2022, respectively; 0 and 1,034,890 shares issued and outstanding at December 31, 2023 and December 31, 2022, respectively	-	19,867,095
Total convertible preferred stock	-	24,287,211
Stockholders' Equity (Deficit):		
Common stock, \$0.001 par value: 1,000,000,000 and 4,163,600 shares authorized as of December 31, 2023 and 2022, respectively, 5,674,520 and 518,140 shares issued and outstanding at December 31, 2023 and December 31, 2022, respectively	5,674	518
Additional paid-in capital	61,811,889	18,983,339
Accumulated deficit	(54,440,789)	(52,268,916)
Total stockholders' equity (deficit)	\$ 7,376,774	(33,285,059)
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	\$ 9,972,521	\$ 4,157,706

See accompanying notes to the consolidated financial statements

CervoMed Inc.
Consolidated Statements of Operations

	Years Ended December 31,	
	2023	2022
Grant revenue	\$ 7,144,872	\$ -
Operating expenses:		
Research and development	8,438,499	1,336,469
General and administrative	6,519,268	2,139,065
Total operating expenses	14,957,767	3,475,534
Loss from operations	(7,812,895)	(3,475,534)
Other income (expense):		
Other income (expense)	5,421,592	(2,389,152)
Interest income	219,430	62,226
Interest expense	-	(587)
Total other income (expense)	5,641,022	(2,327,513)
Net loss	\$ (2,171,873)	\$ (5,803,047)
Per share information:		
Net loss per share of common stock - basic and diluted	\$ (0.82)	\$ (11.20)
Weighted average shares outstanding - basic and diluted	2,661,416	518,140

See accompanying notes to the consolidated financial statements

CervoMed Inc.
Consolidated Statements of Changes in Convertible Preferred Stock and Stockholders' Equity (Deficit)

	Years Ended December 31, 2023 and 2022										
	Series A-1 Preferred Stock		Series A-2 Preferred Stock		Series B Preferred Stock		Common Stock		Additional Paid in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balance at January 1, 2022	1,960,600	246,849	335,711	4,173,267	1,034,890	19,867,095	518,140	518	18,521,988	(46,465,869)	(27,943,363)
Stock-based compensation expense	-	-	-	-	-	-	-	-	333,835	-	333,835
Contributed capital in lieu of executive compensation	-	-	-	-	-	-	-	-	127,516	-	127,516
Net loss	-	-	-	-	-	-	-	-	-	(5,803,047)	(5,803,047)
Balance at January 1, 2023	1,960,600	\$ 246,849	335,711	\$ 4,173,267	1,034,890	\$ 19,867,095	518,140	\$ 518	\$ 18,983,339	\$ (52,268,916)	\$ (33,285,059)
Conversion of convertible preferred stock to common stock	(1,960,600)	(246,849)	(335,711)	(4,173,267)	(1,034,890)	(19,867,095)	2,936,566	2,937	24,284,274	-	24,287,211
Issuance of common stock upon settlement of Convertible Notes	-	-	-	-	-	-	795,905	796	6,988,953	-	6,989,749
Issuance of common stock to Diffusion stockholders in reverse recapitalization, net of issuance costs	-	-	-	-	-	-	1,360,244	1,360	10,337,754	-	10,339,114
Sale of common stock	-	-	-	-	-	-	63,422	63	809,937	-	810,000
Stock-based compensation expense, including vesting of RSUs	-	-	-	-	-	-	77	-	407,632	-	407,632
Issuance of common stock from exercises of stock options	-	-	-	-	-	-	359	-	-	-	-
Repurchase of common stock from net settled stock option	-	-	-	-	-	-	(193)	-	-	-	-
Net loss	-	-	-	-	-	-	-	-	-	(2,171,873)	(2,171,873)
Balance at December 31, 2023	-	\$ -	-	\$ -	-	\$ -	5,674,520	\$ 5,674	\$ 61,811,889	\$ (54,440,789)	\$ 7,376,774

See accompanying notes to the consolidated financial statements

CervoMed Inc.
Consolidated Statements of Cash Flows

	Years Ended December 31,	
	2023	2022
Cash flows from operating activities:		
Net loss	\$ (2,171,873)	\$ (5,803,047)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	407,632	333,835
Capital in lieu of executive compensation	-	127,516
Change in fair value of convertible debt	(5,424,251)	2,389,000
Changes in operating assets and liabilities:		
Prepaid expenses, deposits and other assets	(1,200,144)	85,104
Grant receivable	(915,404)	-
Accounts payable	565,169	79,154
Accrued expenses and other liabilities	1,289,024	215,679
Net cash used in operating activities	<u>(7,449,847)</u>	<u>(2,572,759)</u>
Net assets assumed in connection with reverse recapitalization	11,887,757	-
Proceeds from sale of common stock	810,000	-
Payment of reverse recapitalization costs	<u>(1,548,643)</u>	<u>-</u>
Net cash provided by financing activities	<u>11,149,114</u>	<u>-</u>
Net increase (decrease) in cash and cash equivalents	3,699,267	(2,572,759)
Cash and cash equivalents at beginning of year	4,093,579	6,666,338
Cash and cash equivalents at end of year	<u>\$ 7,792,846</u>	<u>\$ 4,093,579</u>
Supplemental disclosure of non-cash financing activities:		
Conversion of Convertible Notes	<u>\$ 6,989,749</u>	<u>\$ -</u>
Conversion of convertible preferred stock	<u>\$ 24,287,211</u>	<u>\$ -</u>

See accompanying notes to the consolidated financial statements

CervoMed Inc.
Notes to the Consolidated Financial Statements

1. The Company and Description of Business

The Company is a corporation organized under the laws of the state of Delaware and headquartered in Boston, Massachusetts. The Company is a biotechnology company developing treatments for age-related neurologic disorders. The Company is currently developing its product candidate neflamapimod, an investigational orally administered small molecule brain penetrant that inhibits p38 α . Neflamapimod has the potential to treat synaptic dysfunction, the reversible aspect of the underlying neurodegenerative processes that cause disease in DLB and certain other major neurological disorders and is currently being evaluated in a Phase 2b study in patients with DLB.

On March 30, 2023, Diffusion Pharmaceuticals Inc. (“Diffusion”), Dawn Merger Inc., a wholly-owned subsidiary of Diffusion (“Merger Sub”) and EIP Pharma, Inc. (“EIP”) entered into the Merger Agreement (Note 4), pursuant to which, at the Effective Time, Merger Sub merged with and into EIP, with EIP surviving the Merger as a wholly-owned subsidiary of the Company. In connection with the Merger, on August 16, 2023, the Company changed its corporate name from “Diffusion Pharmaceuticals Inc.” to “CervoMed Inc.”

On August 16, 2023, Diffusion approved a one-for-1.5 reverse stock split which was consummated for historical Diffusion shares in connection with the Merger. In addition, upon consummation of the Merger, all historical EIP shares were adjusted using an exchange ratio of 0.1151. All information in the accompanying consolidated financial statements and notes thereto regarding share amounts of common stock, price per share of common stock and the conversion factor for preferred stock into common stock has been adjusted to reflect the application of the reverse stock split and the exchange ratio on a retroactive basis.

All shares of EIP common stock outstanding immediately prior to the Effective Time, after giving effect to the conversion of EIP preferred stock and the Convertible Notes (and excluding shares held as treasury stock by EIP, shares held or owned by the Company and any dissenting shares), converted into the right to receive, in the aggregate, 4,314,033 shares of the Company’s common stock and prefunded warrants to purchase 495,995 shares of common stock, based on an exchange ratio of 0.1151.

2. Liquidity and Capital Resources

The Company has generated negative cash flows from operations and, as of December 31, 2023, had an accumulated deficit of approximately \$54.4 million. In January 2023, the Company was awarded a \$21.0 million grant from the NIA to support its ongoing RewinD-LB Trial, which is expected to be received over a three-year period. In July 2023, the Company sold common stock for proceeds of \$0.8 million. In addition, the Company received \$12.7 million in cash and cash equivalents through the reverse recapitalization. The Company expects to continue to generate operating losses for the foreseeable future. The Company’s future viability is dependent on its ability to raise additional capital to finance its operations and pursue its business strategies. There can be no assurances that additional funding will be available on terms acceptable to the Company, or at all. These conditions cause substantial doubt regarding the Company’s ability to continue as a going concern.

The Company will continue to require additional financing to advance current product candidates through clinical development, to develop, acquire or in-license other potential product candidates and to fund operations for the foreseeable future. The Company expects that its existing cash and cash equivalents as of December 31, 2023, along with the remaining funds expected to be received from the NIA Grant, will not be sufficient to enable it to fund its operating expenses and capital expenditure requirements, and continue as a going concern for at least twelve months following the issuance of these consolidated financial statements. The Company will continue to seek funds through equity offerings, debt financings or other capital sources, including potential collaborations, grants, licenses and other similar arrangements. However, the Company may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Without additional funding, the Company would be forced to delay, reduce or eliminate its research and development programs. Accordingly, since the financing discussed below has not been completed, substantial doubt exists about the Company’s ability to continue as a going concern within one year after the date these financial statements are issued. The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

On March 28, 2024, the Company entered into a securities purchase agreement with certain purchasers named therein related to the private placement of an aggregate of 2,532,285 units, each comprised of (i) (A) one share of common stock or (B) one Pre-Funded Warrant and (ii) one Series A Warrant. The aggregate upfront gross proceeds for the 2024 Private Placement are expected to be approximately \$50 million, before deducting offering fees and expenses, and up to an additional approximately \$99.4 million in gross proceeds if the Series A Warrants are fully exercised for cash. The 2024 Private Placement is expected to close on or about April 1, 2024, subject to customary closing conditions. The consolidated financial statements do not reflect and do not include any adjustments for the Company’s expected receipt of proceeds from the 2024 Private Placement.

3. Summary of Significant Accounting Policies

Basis of presentation

The consolidated financial statements have been prepared in conformity with US GAAP as defined by the FASB.

Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of estimates

The preparation of consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, grant revenue, expenses, and related disclosures. On an ongoing basis, the Company's management evaluates its estimates, including estimates related to money market accounts, clinical trial accruals, stock-based compensation expense, grant revenue, Convertible Notes, and expenses during the reporting period. The Company bases its estimates on historical experience and other market-specific or relevant assumptions that it believes to be reasonable under the circumstances. Actual results may differ significantly from those estimates or assumptions.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk are primarily cash and cash equivalents. The Company maintains its cash and cash equivalent balances with financial institutions that management believes are creditworthy. The Company has no financial instruments with off-balance-sheet risk of loss. The Company has not experienced any losses in such accounts.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of 90 days or less at the date of purchase to be cash and cash equivalents. Cash equivalents, which consist of amounts invested in money market funds, are stated at fair value. There are no unrealized gains or losses on the money market funds for the years ended December 31, 2023 and 2022.

Fair Value of Financial Instruments

The Company's financial instruments consist primarily of cash and cash equivalents, accounts payable, previously outstanding Convertible Notes and accrued liabilities. The Company's cash and cash equivalents, accounts payable and accrued liabilities approximate fair value due to their relatively short maturities. The Company determined the fair value of the Convertible Notes as described in Note 9. In connection with the consummation of the Merger (Note 4) on August 16, 2023, the Convertible Notes were converted into EIP Common Stock which was subsequently converted into the right to exchange such shares of EIP Common Stock for shares of the Company's common stock.

The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines the fair value of its financial instruments based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

Level 1 – Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2 – Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3 – Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

The following table presents the Company’s assets that are measured at fair value on a recurring basis:

	December 31, 2023		
	(Level 1)	(Level 2)	(Level 3)
Assets			
Cash equivalents (money market accounts)	\$ 7,792,846	\$ -	\$ -
Total assets measured at fair value	<u>\$ 7,792,846</u>	<u>\$ -</u>	<u>\$ -</u>
December 31, 2022			
	(Level 1)	(Level 2)	(Level 3)
Assets			
Cash equivalents (money market accounts)	\$ 4,093,579	\$ -	\$ -
Total assets measured at fair value	<u>\$ 4,093,579</u>	<u>\$ -</u>	<u>\$ -</u>
Liabilities			
Convertible Notes	\$ -	\$ -	\$ 12,414,000
Total liabilities measured at fair value	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 12,414,000</u>

The following table presents a roll-forward of the fair value of the Convertible Notes (Note 9) for which fair value is determined by Level 3 inputs:

	Year Ended	
	December 31, 2023	December 31, 2022
Beginning balance	\$ 12,414,000	\$ 10,025,000
Fair value adjustment	(5,424,251)	2,389,000
Reclassification to additional paid in capital upon conversion	(6,989,749)	-
Ending balance	<u>\$ -</u>	<u>\$ 12,414,000</u>

Valuation techniques used to measure fair value maximize the use of relevant observable inputs and minimize the use of unobservable inputs (Note 9). The Company's Convertible Notes are classified within Level 3 of the fair value hierarchy because the fair value measurement is based, in part, on significant inputs not observed in the market.

There were no transfers among Level 1, Level 2 or Level 3 categories in the years ended December 31, 2023 or 2022.

The fair value of the 2020 Notes and the 2021 Notes, and collectively the Convertible Notes (Note 9) as of December 31, 2022 were estimated as the combination of a zero-coupon bond and a call option. The combined values for each of the 2020 Notes and the 2021 Notes as of December 31, 2022 were then weighted by the probability of completing a financing or reverse merger. This approach resulted in the classification of the 2020 Notes and the 2021 Notes as of December 31, 2022 as Level 3 of the fair value hierarchy. The assumptions utilized to value the 2020 Notes and the 2021 Notes as of December 31, 2022 were an estimated term of 0.94 years, volatility of 80.0% and a market yield of 55.2%. The measurement of fair value incorporates expected future cash flows associated with interest payments; as such, there is no separate accrual for interest accrued but not yet paid.

Leases

In February 2016, the FASB issued ASU No. 2016-02, "Leases", which establishes a ROU model. That requires a lessee to recognize an ROU asset and corresponding lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the statement of operations as well as the reduction of the ROU asset. The new standard provides a number of optional practical expedients in transition. The Company has elected to apply (i) the practical expedient, which allows us to not separate lease and non-lease components, for new leases and (ii) the short-term lease exemption for all leases with an original term of less than 12 months, for purposes of applying the recognition and measurements requirements in the new standard.

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on specific facts and circumstances, the existence of an identified asset(s), if any, and the Company's control over the use of the identified asset(s), if applicable. Operating lease liabilities and their corresponding ROU assets are recorded based on the present value of future lease payments over the expected lease term. The interest rate implicit in lease contracts is typically not readily determinable. As such, the Company will utilize the incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment.

The Company has elected to combine lease and non-lease components as a single component. Operating leases will be recognized on the consolidated balance sheet as ROU assets, lease liabilities current and lease liabilities non-current. Fixed rent payments are included in the calculation of the lease balances, while variable costs paid for certain operating and pass-through costs are excluded. Lease expense is recognized over the expected term on a straight-line basis.

Research and Development

Research and development costs are expensed as incurred and consist primarily of new product development. Research and development costs include salaries and benefits, consultants' fees, process development costs and stock-based compensation, as well as fees paid to third parties that conduct certain research and development activities on the Company's behalf.

A substantial portion of the Company's ongoing research and development activities are conducted by third-party service providers. The Company records accrued expenses for estimated preclinical study and clinical trial expenses. Estimates are based on the services performed pursuant to contracts with research institutions, contract research organizations in connection with clinical studies, investigative sites in connection with clinical studies, vendors in connection with preclinical development activities, and contract manufacturing organizations in connection with the production of materials for clinical trials. Further, the Company accrues expenses related to clinical trials based on the level of subject enrollment and activity according to the related agreement. The Company monitors subject enrollment levels and related activity to the extent reasonably possible and makes judgments and estimates in determining the accrued balance in each reporting period. Payments for these activities are based on the terms of the individual arrangements, which may differ from the pattern of costs incurred, and are reflected in the financial statements as prepaid or accrued research and development.

If the Company underestimates or overestimates the level of services performed or the costs of these services, actual expenses could differ from estimates. To date, the Company has not experienced significant changes in its estimates of preclinical studies and clinical trial accruals.

Patent Costs

All patent-related costs incurred in connection with filing and prosecuting patent applications are expensed as incurred due to the uncertainty about the recovery of the expenditure. Amounts incurred are classified as general and administrative expenses in the consolidated statements of operations.

Stock-based Compensation

Stock-based compensation for employee and non-employee awards is measured on the grant date based on the fair value of the award and recognized on a straight-line basis over the requisite service period. The fair value of stock options to purchase common stock are measured using the Black-Scholes option pricing model. The Company accounts for forfeitures as they occur.

The fair value of stock options is determined by the Company using the methods and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment and estimation by management.

Expected Term—The expected term represents the period that stock-based awards are expected to be outstanding. The Company uses the “simplified method” to estimate the expected term of stock option grants. Under this approach, the weighted-average expected life is presumed to be the average of the contractual term of ten years and the weighted-average vesting term of the Company stock options, taking into consideration multiple vesting tranches. The Company utilizes this method due to lack of historical data and the plain-vanilla nature of the Company’s stock-based awards.

Expected Volatility—The Company has limited information on the volatility of its common stock as the shares were not actively traded on any public markets until recently. The expected volatility was derived from the historical stock volatilities of comparable peer public companies within its industry. These companies are considered to be comparable to the Company’s business over a period equivalent to the expected term of the stock-based awards.

Risk-Free Interest Rate—The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the date of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the and stock options expected term.

Expected Dividend Rate—The expected dividend is zero as the Company has not paid, nor does it anticipate paying, any dividends on its stock options in the foreseeable future.

Grant Revenue Recognition

The Company generates revenue from government contracts that reimburse the Company for certain allowable costs for funded projects.

The Company recognizes funding received as grant revenue for the Company’s grant from the NIA, rather than as a reduction of research and development expenses, because the Company is the principal in conducting the research and development activities and these contracts are central to its ongoing operations. Revenue is recognized as the qualifying expenses related to the contracts are incurred. Revenue recognized upon incurring qualifying expenses in advance of receipt of funding is recorded in the Company’s consolidated balance sheets as accounts receivable. Funding received in advance of services rendered are recorded in the Company’s consolidated balance sheets as deferred grant revenue. The related costs incurred by the Company are included in research and development expense in the Company’s consolidated statements of operations.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statement and tax basis of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to recover or settle. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income for the period that includes the enactment date.

The deferred tax assets are recognized to the extent the Company believes that these assets are more likely than not to be realized. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. Due to the Company's historical operating performance and the recorded cumulative net losses in prior fiscal periods, the net deferred tax assets have been fully offset by a valuation allowance.

The Company records uncertain tax positions using a two-step process. First, the Company determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position. Second, for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with the related tax authority.

The Company recognizes interest and penalties, if any, related to unrecognized tax benefits on the interest expense line and other expense line, respectively, in the accompanying statements of operations. Accrued interest and penalties are included on the related liability lines in the consolidated balance sheets.

Net Loss Per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during each period (and potential shares of common stock that are exercisable for little or no consideration). Diluted loss per share includes the effect, if any, from the potential exercise or conversion of securities such as common stock warrants and stock options which would result in the issuance of incremental shares of common stock. For diluted net loss per share, the weighted-average number of shares of common stock is the same for basic net loss per share due to the fact that when a net loss exists, dilutive securities are not included in the calculation as the impact is anti-dilutive. The pre-funded warrants to purchase common stock issued in connection with the Merger are included in the calculation of basic and diluted net loss per share as the exercise price of \$0.001 per share is non-substantive and is virtually assured. The pre-funded warrants are more fully described in Note 11.

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

	December 31,	
	2023	2022
Preferred Series A-1	-	1,960,600
Preferred Series A-2	-	335,711
Preferred Series B	-	1,034,890
Warrants	598,457	43,618
Stock options	349,384	114,516
Total	<u>947,841</u>	<u>3,489,335</u>

Segments

The Company has one operating segment. The Company's chief operating decision maker, its Chief Executive Officer, manages the Company's operations on a consolidated basis for purposes of allocating resources.

Recently Issued But Not Yet Adopted Accounting Pronouncements

In January 2021, the FASB issued ASU No. 2021-01 "Reference Rate Reform (Topic 848): Scope" ("ASU 2021-01"), which was effective immediately and permits entities to elect certain optional expedients and exceptions when accounting for derivatives and certain hedging relationships affected by changes in interest rates and the transition. Additionally, ASU 2022-06 "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848" defers the sunset date of ASC 848 from December 31, 2022 to December 31, 2024. The new guidance is effective for fiscal years beginning after December 31, 2024. The Company does not currently believe that this transition from LIBOR will have a material impact on its financial statements.

In November 2023, the FASB issued ASU No. 2023-07 "Segment Reporting - Improvements to Reportable Segment Disclosures" ("ASU 2023-07"), which updates reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses and information used to assess segment performance. The guidance is effective for the Company beginning in the year ended December 31, 2025, with early adoption permitted. The Company expects the new guidance will have an immaterial impact on its consolidated financial statements.

In December 2023, the FASB issued ASU No. 2023-09, Income Taxes (Topic 740): "Improvements to Income Tax Disclosures" ("ASU 2023-09"). ASU No. 2023-09 is intended to improve income tax disclosure requirements by requiring (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) the disaggregation of income taxes paid by jurisdiction. The guidance makes several other changes to the income tax disclosure requirements. The guidance in ASU 2023-09 will be effective for annual reporting periods in fiscal years beginning after December 15, 2024. The Company is currently evaluating the impact that the adoption of ASU 2023-09 will have on its consolidated financial statements and disclosures.

4. Merger

On August 16, 2023, the Company completed the Merger of EIP and Merger Sub as discussed in Note 1. For financial reporting purposes, EIP was determined to be the accounting acquirer based upon the terms of the Merger and other factors, including: (i) EIP securityholders immediately prior to the Merger owning approximately 76% of the Company immediately following the Merger, (ii) EIP appointing the majority (five of seven) of the Company's Board immediately following the Merger and (iii) former EIP management holding the majority of key positions of management, including the Chief Executive Officer and Chairman of the Board positions, immediately following the Merger. The Merger was also accounted for as a reverse recapitalization under US GAAP because the primary assets of the Company immediately prior to the Merger were cash and cash equivalents. Accordingly, (i) for all periods prior to the Merger, EIP's historical financial statements and results of operations replace and are deemed to be the Company's financial statements and results of operations for such periods, (ii) the Merger was treated as the equivalent of EIP issuing shares of common stock to the holders of the Company's common stock immediately prior to the Merger as consideration to acquire the net assets of the Company, and (iii) the net assets of the Company as of immediately prior to the Merger were recorded at their acquisition-date fair value in the consolidated financial statements of EIP. Immediately after the Merger, there were approximately 5,674,277 shares of the Company's common stock outstanding.

The following table shows the net assets acquired in the Merger:

	August 16, 2023
Cash and cash equivalents	\$ 12,705,140
Prepaid and other assets	406,488
Accounts payable and accrued expenses	(1,223,871)
Total net assets assumed	11,887,757
Minus: Transaction costs	(1,548,643)
Total net assets assumed minus transaction costs	<u>\$ 10,339,114</u>

5. Significant Agreements and Contracts

Vertex Option and License Agreement

In August 2012, the Company entered the Vertex Agreement, as amended, to acquire an exclusive license to develop and commercialize a drug candidate “VX-745” from Vertex. In August 2014, the Company exercised its option to acquire the license and paid an option fee of \$100,000, which was expensed as incurred as a component of research and development expense.

The Vertex Agreement granted the Company the exclusive worldwide use of VX-745 in the field of diagnosis, treatment and prevention of Alzheimer’s disease and related central nervous system disorders in humans.

As part of the Vertex Agreement, the Company is obligated to make certain payments totaling up to approximately \$117.0 million upon achievement of certain regulatory and sales milestones, and royalties on net sales of products on indications covered by the Vertex Agreement. The first expected milestone events concern filing of an NDA, with the FDA for marketing approval of neflamapimod, in the U.S., or a similar filing for a non-U.S. major market, as specified in the Vertex Agreement, and such royalties will be on a sliding scale of percentages of net sales in the low- to mid-teens, depending on the amount of net sales in the applicable years. The Company is also obligated to make a milestone payment to Vertex upon net sales reaching a certain specified amount in any 12-month period. The Vertex Agreement states that royalties will be reduced by 50% during any portion of the royalty term when there is no valid claim of an issued patent within specified patent rights covering the licensed product. The Company also has the right to deduct, on a country by country basis, from royalties otherwise payable to Vertex under the terms of the Vertex Agreement, 50% of all royalties, upfront fees, milestones and other payments paid by the Company or any of the Company’s affiliates or sublicensees to third parties under licenses that are necessary for the development, manufacture, sale or use of a licensed product, provided that in no event will the royalty payable to Vertex be reduced to less than 50% of the rates specified in the Vertex Agreement, subject to certain adjustments specified therein. The Company has made a total of \$100,000 in payments to Vertex related to the Vertex Agreement. No payments were made during the years ended December 31, 2023 and 2022.

National Institute of Aging Grant

In January 2023, the Company was awarded a \$21.0 million grant from the NIA to support a Phase 2b study of neflamapimod in dementia with Lewy bodies. The grant monies are expected to be received over a period of three years including \$6.7 million in 2023, \$8.1 million in 2024 and \$6.2 million in 2025.

The total revenue recognized from the NIA Grant was \$7.1 million year ended December 31, 2023. As of December 31, 2023, total cash funding of \$6.2 million has been received from the NIA Grant, resulting in approximately \$15.8 million in funding remaining. In addition, \$0.9 million has been recorded as a receivable in the consolidated balance sheet at December 31, 2023, which was received subsequent to December 31, 2023.

The Company received access to the current year 2 (i.e., the year ending December 31, 2024) funding in the amount of \$7.3 million in February 2024. This amount was 90% of the full year 2 amount provided for in the NIA Grant due to current NIA policy as a result of the U.S. government currently being funded on the basis of a continuing resolution (the “Continuing Resolution”).

6. Prepaid Expenses

Prepaid expenses consisted of the following:

	December 31,	
	2023	2022
Prepaid clinical expenses	\$ 711,362	\$ -
Insurance	436,859	9,937
Rent	-	2,455
Prepaid professional services	37,917	-
Other	70,363	51,735
Total	<u>\$ 1,256,501</u>	<u>\$ 64,127</u>

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	December 31,	
	2023	2022
Employee compensation costs	\$ 1,026,054	\$ 364,070
Clinical development costs	389,045	23,185
Professional fees	309,062	206,675
State franchise and excise tax	120,456	-
Other	88,659	50,322
Total	<u>\$ 1,933,276</u>	<u>\$ 644,252</u>

8. Line of Credit

The Company established a line of credit with a lender during the year ended December 31, 2020 in the amount of \$2.5 million with a variable interest rate of 1.75% over the 30-day LIBOR (7.22% and 6.08% at December 31, 2023 and December 31, 2022, respectively). The line is secured by the personal assets of the Company's Chief Executive Officer and the former Chair of the Board.

No drawdowns were made, and no costs incurred related to the line of credit during the year ended December 31, 2023 or 2022. The line of credit was terminated on February 14, 2024.

9. Convertible Notes

In December 2020, EIP issued the 2020 Notes to predominantly related party investors for proceeds of \$5.1 million. In December 2021, EIP issued the 2021 Notes to predominantly related party investors for proceeds of \$6.0 million. Upon issuance, the Company elected the fair value option for the Convertible Notes in accordance with ASC 825, "Financial Instruments," pursuant to which the entire instrument, including interest expense, is measured at fair value with the initial change in fair value deemed to be a capital contribution and any subsequent changes in fair value being recorded to other income (expense) on the consolidated statement of operations. The fair value adjustments recognized in other income (expense) were \$5.4million and \$(2.4)million for the years ended December 31, 2023 and 2022, respectively.

In April 2022, the Company entered into the 2022 Notes Amendment with the noteholders for the 2020 Notes (the "Amendment"). In accordance with the Amendment, the maturity of the 2020 Notes was extended from June 2022 to December 2023, the interest rate was modified so interest accrued at 5% through the original maturity of June 2022 and at 0% thereafter, the conversion discount was increased from 20% to 30%, and a conversion price limit of \$3.00 was established, as discussed further below. Expenses associated with the amendment were *de minimis*.

The Company concluded the 2022 Notes Amendment qualified as a troubled debt restructuring, in accordance with FASB ASC 470, Debt, as the noteholders for the 2020 Notes, for economic reasons related to the Company's financial difficulties, granted concessions to the Company. The Company concluded no gain or loss, and no adjustment to, or reclassification of, the carrying value of the 2020 Notes were considered necessary as a result of the 2022 Notes Amendment. In addition, the Company concluded there was no other financial statement impact as a result of the 2022 Notes Amendment, as any prospective change would be related to interest and, as a result of the amendment, the interest rate decreased to 0% following the original maturity of June 2022.

In June 2023, EIP entered into the 2023 Notes Amendment which amended the conversion price of the Convertible Notes to \$1.47 per share of EIP Common Stock upon effectiveness of the Merger with the Diffusion or a 30% conversion discount upon the occurrence of any other reverse merger. Further, the 2023 Notes Amendment provided that if the Merger with the Company resulted in a holder of these notes beneficially owning more than 9.99% of the outstanding voting stock of the Company, then, the holder of these notes shall be granted pre-funded warrants in lieu of the Company's common stock for the conversion of any principal and accrued but unpaid interest in excess of such threshold. The exercise price of one share of the Company's common stock under this pre-funded warrant is equal to \$0.001 (Note 11).

The 2023 Notes Amendment qualified as a modification in accordance with FASB ASC 470 *Debt*, since there were no concessions granted and no substantive change to the fair value of the conversion option before and after the 2023 Notes Amendment. There was no financial statement impact as a result of the 2023 Notes Amendment other than the change in fair value of the Convertible Notes during the year ended December 31, 2023 and debt issuance costs of approximately \$50,000 that was recorded to general and administrative expenses in the statements of operations.

As a result of the Merger (Note 4), pursuant to the terms thereof, the Convertible Notes converted into shares of EIP Common Stock which were subsequently converted into the right to exchange such shares for 897,272 shares of the Company's common stock and, in certain cases, pre-funded warrants to purchase the Company's common stock. Accordingly, the Convertible Notes were adjusted to fair value prior to conversion by multiplying the trading price of the Company's common stock at the date of the Effective Time and the 795,905 common shares and 101,367 pre-funded warrants issued upon conversion. The Company recorded a gain on the fair value adjustment of the Convertible Notes of \$5.4 million for year ended December 31, 2023 and recorded \$7.0 million to additional paid in capital for the issuance of common stock upon settlement of the Convertible Notes.

10. Commitments and Contingencies

Operating Leases

The Company has a short-term agreement to utilize membership-based co-working space in Charlottesville, Virginia and a short-term lease for office space in Boston, Massachusetts. Rent expense was approximately \$34,000 and \$45,000 for the years ended December 31, 2023 and 2022, respectively.

Research and Development Arrangements

In the course of normal business operations, the Company would enter into agreements with universities and CROs to assist in the performance of research and development activities and contract manufacturers to assist with chemistry, manufacturing, and controls related expenses. Expenditures to CROs represented a significant cost in clinical development for the Company. The Company could also enter into additional collaborative research, contract research, manufacturing, and supplier agreements in the future, which may require upfront payments and long-term commitments of cash.

Defined Contribution Retirement Plan

The Company has established its 401(k) Plan, which covers all employees who qualify under the terms of the plan. Eligible employees may elect to contribute to the 401(k) Plan up to 90% of their compensation, limited by the IRS-imposed maximum. The Company provides a safe harbor match with a maximum amount of 4% of the participant's compensation. The Company made matching contributions under the 401(k) Plan of *de minimis* amounts for the years ended December 31, 2023 and 2022.

Legal Proceedings

On August 7, 2014, a complaint was filed in the Superior Court of Los Angeles County, California by Paul Feller, the former Chief Executive Officer of the Company's legal predecessor under the caption Paul Feller v. RestorGenex Corporation, Pro Sports & Entertainment, Inc., ProElite, Inc. and Stratus Media Group, GmbH (Case No. BC553996). The complaint asserts various causes of action, including, among other things, promissory fraud, negligent misrepresentation, breach of contract, breach of employment agreement, breach of the covenant of good faith and fair dealing, violations of the California Labor Code and common counts. The plaintiff is seeking, among other things, compensatory damages in an undetermined amount, punitive damages, accrued interest and an award of attorneys' fees and costs. On December 30, 2014, the Company filed a petition to compel arbitration and a motion to stay the action. On April 1, 2015, the plaintiff filed a petition in opposition to the Company's petition to compel arbitration and a motion to stay the action. After a related hearing on April 14, 2015, the court granted the Company's petition to compel arbitration and a motion to stay the action. On January 8, 2016, the plaintiff filed an arbitration demand with the American Arbitration Association. On November 19, 2018 at an Order to Show Cause Re Dismissal Hearing, the court found sufficient grounds not to dismiss the case and an arbitration hearing was scheduled, originally for November 2020 but later postponed due to the COVID-19 pandemic and related restrictions on gatherings in the State of California. In addition, following the November 2018 hearing, an automatic stay was placed on the arbitration in connection with the plaintiff filing for personal bankruptcy protection. On October 22, 2021, following a determination by the bankruptcy trustee not to pursue the claims and release them back to the plaintiff, the parties entered into a stipulation to abandon arbitration and return the matter to state court. A case management conference was held on February 23, 2022 at which an initial trial date of May 24, 2023 was set, and the parties have agreed to stipulate to mediation in advance of the trial. On October 20, 2022, the parties filed a joint stipulation to continue the trial and certain deadlines related to the mediation in order to allow plaintiff's counsel to continue to seek treatment for an ongoing medical issue. On November 1, 2022, based on the parties joint stipulation, the court entered an order continuing the trial date to October 25, 2023, on October 6, 2023, the court entered an order further continuing the trial date to April 24, 2024, and on March 3, 2024, based on an additional joint stipulation of the parties, the court entered an order continuing the trial date to October 23, 2024.

The Company believes that it has meritorious defenses to the claims alleged in this matter and is defending itself vigorously. However, at this stage, the Company is unable to predict the outcome and possible loss or range of loss, if any, associated with its resolution or any potential effect the matter may have on the Company's financial position. Depending on the outcome or resolution of this matter, it could have a material effect on the Company's financial position, results of operations and cash flows.

11. Stockholders' Equity (Deficit) and Common Stock Warrants

On August 16, 2023 in connection with the closing of the Merger, the following is reflected on the consolidated financial statements of convertible preferred stock and stockholders' equity (deficit) for the year ended December 31, 2023: (i) the issuance of 795,905 shares of common stock and 101,367 pre-funded warrants upon the settlement of the Convertible Notes, (ii) the conversion of 3,331,201 shares of convertible preferred stock into 2,936,566 shares of common stock and 394,628 prefunded warrants, and (iii) the issuance of 1,360,244 shares of common stock to Diffusion stockholders as consideration for the Merger.

In July 2023, EIP sold 63,422 shares of common stock at \$12.78 per share (as adjusted for the Exchange Ratio) for net proceeds of approximately \$0.8 million.

Warrants

As of December 31, 2023, the Company had the following warrants outstanding to acquire shares of its common stock:

	Warrants Outstanding	Exercise Price	Expiration Date
Historical Diffusion common stock warrants	58,844	\$26.27 - \$459.06	May 2024 through February 2026
Historical EIP common stock warrants	43,618	\$19.81	April 2028
Pre-funded warrants issued related to closing of reverse recapitalization	495,995	\$0.001	None
	<u>598,457</u>		

Upon completion of the Merger, the Convertible Notes and outstanding shares of EIP preferred stock converted into shares of EIP Common Stock which were subsequently converted into the right to exchange such shares for shares of the Company's common stock or, in certain cases, pre-funded warrants to purchase the Company's common stock. All of the warrants are equity-classified because they are indexed to the Company's own shares and meet the criteria to be classified as an equity instrument.

The Company is party to the 2022 Sales Agreement with BTIG. The 2022 Sales Agreement is an "at-the-market" sales agreement pursuant to which the Company may, from time to time and through BTIG as the Company's agent, sell up to an aggregate of \$20.0 million in shares of common stock by any permissible method deemed an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act. As of the date of this Annual Report, however, the Company has not sold any shares pursuant to the 2022 Sales Agreement.

12. Stock-Based Compensation

2015 Equity Plan

The 2015 Equity Plan provides for increases to the number of shares reserved for issuance thereunder each January 1 equal to 4.0% of the total shares of the Company's common stock outstanding as of the immediately preceding December 31, unless a lesser amount is stipulated by the Compensation Committee of the Company's Board of Directors. As of December 31, 2023, there were 12,580 shares available for future issuance under the 2015 Equity Plan. On January 1, 2024, the number of shares available for future issuance under the 2015 Equity Plan increased by 226,981.

2018 Employee, Director and Consultant Equity Incentive Plan

On March 28, 2018, EIP adopted the 2018 Plan, which was assumed by the Company pursuant to and in accordance with the terms of the Merger Agreement. Under the 2018 Plan, the Company may issue incentive stock options, non-qualified stock options, stock grants, and other stock-based awards to employees, directors, and consultants, as specified in the 2018 Plan and subject to applicable SEC and Nasdaq rules and regulations. The Board of Directors has the authority to determine to whom options or stock will be granted, the number of shares, the term, and the exercise price. Options granted under the 2018 Plan have a term of up to ten years and generally vest over a four-year period with 25% of the options vesting after one-year of service and the remainder vesting monthly thereafter. As of December 31, 2023, there were no shares available for issuance.

The Company recorded stock-based compensation expense in the following expense categories of its consolidated statements of operations:

	Year Ended December 31,	
	2023	2022
Research and development	\$ 143,685	\$ 174,710
General and administrative	263,947	159,125
Total stock-based compensation expense	<u>\$ 407,632</u>	<u>\$ 333,835</u>

The following table summarizes the activity related to all stock option grants for the year ended December 31, 2023:

	Number of Options	Weighted average exercise price per share	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Balance at January 1, 2023	114,516	\$ 25.98	6.72	
Options assumed in the merger	52,574	\$ 313.67		
Granted	198,600	\$ 5.95		
Cancelled	(15,957)	\$ 180.80		
Exercised	(359)	\$ 5.33		
Outstanding at December 31, 2023	<u>349,374</u>	\$ 51.15	8.12	\$ 358,340
Exercisable at December 31, 2023	<u>157,301</u>	\$ 103.67	6.35	\$ 39,820

The Black-Scholes option-pricing model was used to estimate the grant date fair value of each stock option grant at the time of grant using the following weighted-average assumptions:

	December 31,	
	2023	2022
Expected term (in years)	5.75	6.00
Risk-free interest rate	3.9% - 4.5%	1.9%
Expected volatility	81.7% - 83.3%	80.3%
Dividend yield	0.0%	0.0%

During the year ended December 31, 2023, 359 shares underlying options were exercised, of which 193 were withheld as consideration for the exercise price of such shares pursuant to the cashless exercise provision of the related option award agreement. No options were exercised during the year ended December 31, 2022. At December 31, 2023, there was \$1.1 million of unrecognized compensation expense that will be recognized over a weighted-average period of 2.1 years.

Contributed Capital in lieu of Executive Compensation

In 2022, the former Chair of the Board and the Chief Executive Officer offered to forego, without repayment, certain compensation to ensure the Company had enough resources to maintain operations until the financial funding was completed. The amount of \$0.1 million for the year ended December 31, 2022, which is recorded as contributed capital in lieu of executive compensation in additional paid-in capital, will not be paid in cash, debt or equity in the future. No such event occurred during the year ended December 31, 2023.

13. Income Taxes

A reconciliation of income tax benefit at the statutory federal income tax rate and income taxes as reflected in the financial statements as of December 31, 2023 and 2022:

Rate reconciliation:	2023	2022
Federal tax benefit at statutory rate	21.0%	21.0%
State tax, net of federal benefit	6.3%	8.0%
Change in convertible debt	52.8%	-8.6%
Research & Development credit	17.1%	1.2%
Change in valuation allowance	-95.9%	-15.8%
Share-based compensation	-1.0%	0.0%
Other	-0.3%	-5.8%
Total provision	0.0%	0.0%

Deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of assets and liabilities using enacted tax rates in effect for years in which differences are expected to reverse.

Significant components of the Company's deferred tax assets for federal income taxes as of December 31, 2023 and December 31, 2022 consisted of the following:

	2023	2022
Deferred tax assets:		
Net operating loss	\$ 10,495,881	\$ 10,977,455
Research and development credits	708,443	354,283
Capitalized research expenditures	2,271,853	259,749
Stock-based compensation	567,473	514,654
Reserves and accruals	-	105,399
Intangibles	223,548	262,872
Gross deferred tax assets	14,267,198	12,474,412
Less valuation allowance	(14,100,543)	(12,474,412)
Total deferred tax assets	166,655	-
Deferred tax liabilities:		
Prepays	\$ (166,655)	\$ -
Gross deferred tax liabilities	(166,655)	-
Deferred tax assets, net	\$ -	\$ -

The Company does not have unrecognized tax benefits as of December 31, 2023 or December 31, 2022. The Company recognizes interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense.

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred assets will be realized. The ultimate realization of the deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Evaluating the need for a valuation allowance for deferred tax assets often requires judgment and analysis of all the positive and negative evidence available, including cumulative losses in recent years and projected future taxable income, to determine whether all or some portion of the deferred tax assets will not be realized. As of December 31, 2023, the Company has utilized a full valuation allowance to offset the net deferred tax assets as the Company believes it is not more likely than not that the net deferred tax assets will be fully realizable. The valuation allowance increased by \$1.6 million during the year ended December 31, 2023.

As of December 31, 2023, the Company had NOL carryforwards of approximately \$38.9 million and \$37.0 million for federal and state tax purposes, respectively. Federal NOL carryforwards will not expire and state NOL carryforwards will begin to expire in 2038, if not utilized. The TCJA enacted on December 22, 2017 limits a taxpayer's ability to utilize NOL deduction in a year to 80% taxable income for federal net operating losses arising in tax years beginning after 2017, however, federal NOLs post 2017, are now indefinite lived.

As of December 31, 2023, the Company also had federal and state research credit carryforwards of \$0.6 million and \$0.1 million, respectively. The federal and state research credits will begin to expire in 2038 and 2034, respectively.

Generally, utilization of the NOL carryforwards and credits may be subject to an annual limitation due to the ownership change limitations provided by Section 382 of the Code, which provides for limitations on NOL carryforwards and certain built-in losses following ownership changes, and Section 383 of the Code, which provides for special limitations on certain excess credits, as well as similar state provisions. Accordingly, the Company's ability to utilize NOL carryforwards may be limited as the result of such an "ownership change." A formal Section 382 study was performed through December 31, 2023 which resulted concluded there have been no historical section 382 ownership changes, thus the NOL carryforwards are not be subject to an annual limitation. With respect to Diffusion, the Company deems the historical Diffusion tax attributes (NOLs/Credits) are unusable due to the IRC Section 382 limitation. ASC 740-10-25 states that a "write off might be appropriate if there is only a remote likelihood that the entity will utilize the carryforward (i.e. NOL), it is acceptable for the entity to write off the deferred tax assets against the valuation allowance, thereby eliminating the need to disclose the gross amounts. As such, the Company has written off these attributes.

The Company files federal and state income tax returns in jurisdictions with varying statutes of limitations. Due to its NOL carryforwards, the Company's income tax returns generally remain subject to examination by federal and state tax authorities. The Company is currently not subject to any income tax audits by federal or state taxing authorities. The statute of limitations for tax liabilities for all years remains open.

The Company uses the "more likely than not" criterion for recognizing the income tax benefit of uncertain income tax positions and establishing measurement criteria for income tax benefits. The Company has evaluated the impact of these positions and believes that its income tax filing positions and deductions will be sustained upon examination. Accordingly, no reserves for uncertain income tax positions or related accruals for interest and penalties have been recorded as of December 31, 2023 and 2022.

14. Subsequent Events

2024 Private Placement

On March 28, 2024, the Company entered into a securities purchase agreement with certain purchasers named therein related to the private placement of an aggregate of 2,532,285 units, each comprised of (i) (A) one share of common stock or (B) one Pre-Funded Warrant and (ii) one Series A Warrant. The 2024 Private Placement is expected to close on or about April 1, 2024, subject to customary closing conditions. The aggregate upfront gross proceeds from the 2024 Private Placement are expected to be approximately \$50 million, before deducting offering fees and expenses, and additional gross proceeds of up to approximately \$99.4 million may be received if the Series A Warrants are exercised in full for cash.

Pre-Funded Warrant Amendment and Exercise

On February 26, 2024, following the effectiveness of an amendment eliminating certain beneficial ownership limitations set forth therein, the Company's previously outstanding pre-funded warrant was exercised in full by the holder thereof pursuant to the cashless exercise provision in Section 2(c) of the pre-funded warrant. Upon exercise, 36 shares were withheld in lieu of a cash payment of the exercise price and the holder was issued 495,959 shares of common stock.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15I and 15d-15(e) promulgated under the Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and we are required to apply our judgment in evaluating the cost-benefit relationship of possible internal controls. Our management evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered in this report. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are ineffective due to the material weaknesses noted below in the subsequent paragraph.

Material Weaknesses in Internal Control over Financial Reporting

In connection with the audit of the Company's consolidated financial statements for the years ended December 31, 2023 and 2022, material weaknesses in the Company's internal control over financial reporting were identified in relation to: (i) the recording of significant complex transactions and (ii) the absence of effective controls regarding the accurate identification, evaluation and proper recording of various expense accounts.

A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our condensed consolidated interim financial statements would not be prevented or detected on a timely basis. The identified material weaknesses, if not remediated, could result in a material misstatement to the Company's consolidated financial statements that may not be prevented or detected. A material weaknesses will not be considered remediated until a remediation plan has been fully implemented, the applicable controls operate for a sufficient period of time, and it has been concluded, through testing, that the newly implemented and enhanced controls are operating effectively.

On August 16, 2023, we completed the Merger. For financial reporting purposes, EIP was determined to be the accounting acquirer and, accordingly, for all periods prior to the Merger, EIP's historical financial statements and results of operations replace and are deemed to be the Company's financial statement and results of operations for such periods. While Diffusion was previously subject to the provisions of SOX, EIP, as a private, non-reporting operating company prior to the Merger, was not. Accordingly, upon consummation of the Merger, we began the process of integrating the pre-Merger business of EIP into Diffusion's pre-established public company, internal control framework, including internal controls and information systems and we continue to implement measures designed to improve our internal control over financial reporting to remediate the material weaknesses. As of the date of this Annual Report, we continue to be actively engaged in these efforts through, among other things, adding additional review procedures by qualified personnel over complex accounting matters, and we currently expect to complete the remediation plan during the year ending December 31, 2024. However, the Company cannot predict the success of such efforts or the outcome of its assessment of the remediation efforts and the Company's efforts may not remediate this material weakness in its internal control over financial reporting, or additional material weaknesses may be identified in the future.

Notwithstanding the material weaknesses in internal control over financial reporting described above, our management has concluded that our consolidated financial statements included in this Annual Report are fairly stated in all material respects in accordance with U.S. GAAP.

Attestation Report of the Independent Registered Public Accounting Firm

This report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. As a "smaller reporting company" (as such term is defined in Rule 12b-2 of the Exchange Act), pursuant to Section 989G of the Dodd-Frank Act, we are exempt from the requirement subjecting management's report to attestation by our independent registered public accounting firm.

Change in Internal Control Over Financial Reporting

Except as set forth above, there was no change in our internal control over financial reporting that occurred during our fourth quarter ended December 31, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Acting Principal Financial Officer

On March 28, 2024, J. William Tanner, Ph.D., our Chief Financial Officer, commenced a temporary leave of absence from the Company in order to undergo treatment for a medical condition. In connection with Dr. Tanner's temporary leave of absence, the Board appointed William Elder to temporarily serve as Acting Principal Financial Officer of the Company, effective as of March 28, 2024. Mr. Elder, age 41, has served as our General Counsel and Corporate Secretary since September 2020 and will continue to serve in those roles. Mr. Elder also previously served as our Principal Financial Officer from June 2023 to August 2023.

In connection with such appointment, Mr. Elder did not receive any consideration nor were any modifications made to Mr. Elder's existing employment agreement or outstanding equity awards, which are described under the heading, "Diffusion Executive and Director Compensation," in the Registration Statement and the Company's other filings with the SEC. Except as previously disclosed in the Registration Statement and the Company's other filings with the SEC, (i) there are no arrangements or understandings between Mr. Elder and any other person pursuant to which Mr. Elder was selected as the Acting Principal Financial Officer, (ii) Mr. Elder does not have any direct or indirect material interest in any transaction requiring the disclosure of the information required by Item 404(a) of Regulation S-K, (iii) there is no material plan, contract or arrangement to which Mr. Elder is a party or in which he participates that was entered into, or any grant or award to Mr. Elder or modification thereto, under any such plan, contract or arrangement in connection with his appointment as Acting Principal Financial Officer, and (iv) there are also no family relationships between Mr. Elder and any director or executive officer of the Company.

Adoption, Termination or Modification of Trading Arrangements

During the three months ended December 31, 2023, none of our directors or officers (as defined in Rule 16a-1(f) of the Exchange Act), adopted, terminated or modified a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K).

ITEM 9C. DISCLOSURES REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The additional information required by Item 10 of Form 10-K is incorporated herein by reference from our Proxy Statement, to be filed with the SEC within 120 days after December 31, 2023, the end of the fiscal year to which this Annual Report relates, including the information set forth under the captions, “*Corporate Governance*,” “*Election of Directors*,” “*Executive Officers*,” and “*Certain Relationships and Related Party Transactions*.”

ITEM 11. EXECUTIVE COMPENSATION

The additional information required by Item 11 of Form 10-K is incorporated herein by reference from our Proxy Statement, to be filed with the SEC within 120 days after December 31, 2023, the end of the fiscal year to which this Annual Report relates, including the information set forth under the captions, “*Executive Compensation*,” “*Director Compensation*,” “*Compensation Committee Report*,” and “*Corporate Governance – Compensation Committee Interlocks and Insider Participation*.”

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The additional information required by Item 12 of Form 10-K is incorporated herein by reference from our Proxy Statement, to be filed with the SEC within 120 days after December 31, 2023, the end of the fiscal year to which this Annual Report relates, including the information set forth under the caption, “*Security Ownership of Certain Beneficial Owners and Management*.”

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The additional information required by Item 13 of Form 10-K is incorporated herein by reference from our Proxy Statement, to be filed with the SEC within 120 days after December 31, 2023, the end of the fiscal year to which this Annual Report relates, including the information set forth under the captions, “*Corporate Governance*” and “*Certain Relationships and Related Party Transactions*.”

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The additional information required by Item 14 of Form 10-K is incorporated herein by reference from our Proxy Statement, to be filed with the SEC within 120 days after December 31, 2023, the end of the fiscal year to which this Annual Report relates, including the information set forth under the caption, “*Ratification of Selection of Independent Registered Public Accounting Firm*.”

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Our financial statements are included in *Part II, Item 8* of this Annual Report.

(b) All financial statement schedules have been omitted from this Item 15 as the required information is not applicable, is not present in amounts sufficient to require submission of such schedules, or because the information required is included in our financial statements or the related notes included in *Part II, Item 8* of this Annual Report.

(c) The exhibits set forth in the following "Index to Exhibits" are filed with, furnished with, and/or incorporated by reference into this Annual Report, as set forth therein. A copy of any of such exhibit will be furnished at a reasonable cost, upon receipt from any person of a written request for any such exhibit. Such request should be sent to CervoMed Inc., 20 Park Plaza, Suite 424, Boston, Massachusetts 02116, Attention: General Counsel.

INDEX TO EXHIBITS

No.	Description	Method of Filing
2.1Δ	<u>Agreement and Plan of Merger, dated as of March 30, 2023, by and among Diffusion Pharmaceuticals Inc., EIP Pharma, Inc. and Dawn Merger Sub Inc.</u>	Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on March 30, 2023.
3.1	<u>Certificate of Incorporation of CervoMed Inc., as amended</u>	Incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K filed on March 24, 2023.
3.2	<u>Certificate of Amendment, dated August 16, 2023, to the Certificate of Incorporation, as amended, of CervoMed Inc. (Reverse Stock Split)</u>	Incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed on August 17, 2023.
3.3	<u>Certificate of Amendment, dated August 16, 2023, to the Certificate of Incorporation, as amended, of CervoMed Inc. (Name Change)</u>	Incorporated by reference to Exhibit 3.4 to the Company's Current Report on Form 8-K filed on August 17, 2023.
3.4	<u>Bylaws of CervoMed Inc., as amended</u>	Incorporated by reference to Exhibit 3.5 to the Company's Current Report on Form 8-K filed on August 17, 2023.
4.1	<u>Form of May 2019 Investor Warrant</u>	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 28, 2019.
4.2	<u>Form of May 2019 Placement Agent Warrant</u>	Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 28, 2019.
4.3	<u>Form of November 2019 Series I Investor Warrant</u>	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 13, 2019.
4.4	<u>Form of November 2019 Series II Investor Warrant</u>	Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on November 13, 2019.
4.5	<u>Form of December 2019 Investor Warrant</u>	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 13, 2019.
4.6	<u>Form of December 2019 Placement Agent Warrant</u>	Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on December 13, 2019.
4.7	<u>Form of May 2020 Placement Agent Warrant (In Respect of Exercise Transaction)</u>	Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 8, 2020.
4.8	<u>Form of May 2020 Placement Agent Warrant (In Respect of Offering Transaction)</u>	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 20, 2020.
4.9	<u>Form of February 2021 Underwriter Warrant</u>	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on February 18, 2021.

4.10	<u>Form of 2023 Pre-Funded Investor Warrant</u>	Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 17, 2023.
4.11	<u>Form of EIP 2018 Investor Warrant</u>	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on August 17, 2023.
4.12	<u>Form of EIP 2018 Investor Warrant (AI EIPP Holdings LLC)</u>	Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 17, 2023.
4.13	<u>Form of Series A Warrant expected to be issued in connection with the 2024 Private Placement</u>	Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on March 28, 2024
4.14	<u>Form of Pre-Funded Warrant expected to be issued in connection with the 2024 Private Placement</u>	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on March 28, 2024
4.15	<u>Specimen Stock Certificate</u>	Filed herewith.
4.16	<u>Description of Securities of CervoMed Inc.</u>	Filed herewith.
10.1#	<u>Amended & Restated Employment Agreement, dated as of February 1, 2024, by and between John Alam, M.D. and CervoMed Inc.</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 2, 2024.
10.2#	<u>Amended & Restated Employment Agreement, dated as of February 1, 2024, by and between Robert J. Cobuzzi, Jr., Ph.D. and CervoMed Inc.</u>	Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 2, 2024.
10.3#	<u>Employment Agreement, dated as of November 15, 2023, by and between J. William Tanner, Ph.D. and CervoMed Inc.</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 17, 2023.
10.4#	<u>Employment Agreement, dated as of February 1, 2024, by and between Kelly Blackburn and CervoMed Inc.</u>	Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 2, 2024.
10.5#	<u>Employment Agreement, dated as of September 23, 2020, by and between William Elder and CervoMed Inc.</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed September 25, 2020.
10.6#	<u>Amendment to Employment Agreement, dated March 29, 2023, by and between CervoMed Inc. and William Elder</u>	Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed on March 30, 2023.
10.7#	<u>CervoMed Inc. 2015 Equity Incentive Plan</u>	Incorporated by reference to Appendix C to the Company's definitive proxy statement on Schedule 14A filed on June 10, 2016.

10.8#	<u>Amendment No. 1 to CervoMed Inc. 2015 Equity Incentive Plan</u>	Incorporated by reference to Appendix B to the Company's definitive proxy statement on Schedule 14A filed on June 10, 2016.
10.9#	<u>EIP Pharma, Inc. 2018 Employee, Director and Consultant Equity Incentive Plan</u>	Incorporated by reference to Exhibit 10.31 to the Company's Registration Statement on Form S-4/A filed on July 12, 2023.
10.10#	<u>Form of Stock Option Award Agreement under 2015 Equity Incentive Plan</u>	Incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021.
10.11#	<u>Form of Stock Option Award Agreement under 2018 Employee, Director and Consultant Equity Incentive Plan</u>	Filed herewith.
10.12#	<u>Form of Indemnification Agreement between CervoMed Inc. and each of its directors and officers</u>	Filed herewith.
10.13*	<u>Option and License Agreement, dated as of August 27, 2012, by and between EIP Pharma LLC and Vertex Pharmaceuticals Incorporated</u>	Incorporated by reference to Exhibit 10.23 to the Company's Registration Statement on Form S-4/A filed on July 12, 2023.
10.14*	<u>Amendment No.1, dated as of April 8, 2014, to Option and License Agreement, dated August 27, 2012, by and between EIP Pharma LLC and Vertex Pharmaceuticals Incorporated</u>	Incorporated by reference to Exhibit 10.24 to the Company's Registration Statement on Form S-4/A filed on July 12, 2023.
10.15*	<u>Amendment No.2, dated as of November 17, 2015, to Option and License Agreement, dated August 27, 2012, as amended April 18, 2014, by and between EIP Pharma LLC and Vertex Pharmaceuticals Incorporated</u>	Incorporated by reference to Exhibit 10.25 to the Company's Registration Statement on Form S-4/A filed on July 12, 2023.
10.16	<u>At-The-Market Sales Agreement, dated as of July 22, 2022, by and between CervoMed Inc. and BTIG, LLC</u>	Incorporated by reference to Exhibit 1.1 to the Company's Current Report on Form 8-K filed on July 22, 2022.
10.17	<u>Form of EIP Subscription Agreement, dated as of July 10, 2023</u>	Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on November 13, 2023.
10.18	<u>Form of Lock-up Agreement, dated as of March 30, 2023, related to Merger Agreement</u>	Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on March 30, 2023.
10.19	<u>Securities Purchase Agreement, dated March 28, 2024, by and between CervoMed Inc. and each of the purchasers party thereto, related to the 2024 Private Placement</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 28, 2024.

21.1	Subsidiaries of CervoMed Inc.	Filed herewith.
23.1	Consent of RSM US LLP, independent registered public accounting firm	Filed herewith.
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
31.2	Certification of Acting Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.2	Certification of Acting Principal Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith.
97.1	CervoMed Inc. Clawback Policy	Filed herewith.
101	The following materials from the Company’s annual report on Form 10-K for the year ended December 31, 2023, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations and Comprehensive Loss, (iii) Consolidated Statements of Cash Flows, and (iv) Notes to Consolidated Financial Statements	Filed herewith.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document and contained in Exhibit 101).	
#	Indicates a management contract or compensatory plan or arrangement.	
Δ	Schedules and exhibits have been omitted from this filing pursuant to Item 601(a)(5) of Regulation S-K. The Company agrees to furnish on a supplemental basis a copy of any omitted schedule or exhibit to the SEC upon its request; provided, however, that the Company may request confidential treatment pursuant to Rule 24b-2 of the Exchange Act for any schedule or exhibit so furnished.	
*	Portions of this exhibit (indicated by asterisks) have been omitted in accordance with the rules of the SEC.	

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: March 29, 2024

CERVOMED INC.

By: /s/ John Alam, M.D.

John Alam, M.D.

President, Chief Executive Officer and Director

(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Name and Signature	Title	Date
/s/ John Alam, M.D. John Alam, M.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	March 29, 2024
/s/ William Elder William Elder	General Counsel and Corporate Secretary (Acting Principal Financial Officer)	March 29, 2024
/s/ Joshua S. Boger, Ph.D. Joshua S. Boger, Ph.D.	Chair of the Board	March 29, 2024
/s/ Robert J. Cobuzzi, Ph.D. Robert J. Cobuzzi, Ph.D.	Chief Operating Officer and Director	March 29, 2024
/s/ Sylvie Grégoire, PharmD. Sylvie Grégoire, PharmD.	Director	March 29, 2024
/s/ Jane H. Hollingsworth, J.D. Jane H. Hollingsworth, J.D.	Director	March 29, 2024
/s/ Jeff Poulton Jeff Poulton	Director	March 29, 2024
/s/ Marwan Sabbagh, M.D. Marwan Sabbagh, M.D.	Director	March 29, 2024
/s/ Frank Zavrl Frank Zavrl	Director	March 29, 2024

ZQ|CERT#COY|CLS|RGSTRY|ACCT#|TRANSTYPE|RUN#|TRANS#




 PO BOX 1984, Providence, RI 02918-1984
 MR. A. LAMYLE
 DEMONSTRATION IP #101
 A001
 A002
 A003
 A004

CUSIP IDENTIFIER: XXXXXXXXXX
 Holder ID: XXXXXXXXXX
 Insurance Value: 1,000,000.00
 Number of Shares: 12345
 DTC: 12345678 123456789012345
 Certificate Numbers:

Certificate Numbers	Num/In. Demom.	Total
12345678901234567890	1	1
12345678901234567890	2	2
12345678901234567890	3	3
12345678901234567890	4	4
12345678901234567890	5	5
12345678901234567890	6	6
12345678901234567890	7	7
Total Transaction		28

COMMON STOCK
PAR VALUE \$0.001

Certificate Number
ZQ00000000



CERVOMED INC.
INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

COMMON STOCK

Shares
*****00000*****
*****00000*****
*****00000*****
*****00000*****

THIS CERTIFIES THAT

MR. SAMPLE & MRS. SAMPLE
MR. SAMPLE & MRS. SAMPLE

is the owner of

ZERO HUNDRED THOUSAND
ZERO HUNDRED AND ZERO

SEE REVERSE FOR CERTAIN DEFINITIONS
CUSIP 15715L 10 9


THIS CERTIFICATE IS TRANSFERABLE IN CITIES DESIGNATED BY THE TRANSFER AGENT, AVAILABLE ONLINE AT www.compushare.com

THIS CERTIFIES THAT the registered owner whose name is inscribed herein is the owner of the number of shares of the Common Stock of Cervomed Inc., a Delaware Corporation (the "Corporation"), transferable only on the books of the Corporation in person or by duly authorized attorney upon surrender of this Certificate properly endorsed. This Certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.

IN WITNESS WHEREOF, the said Corporation has caused this Certificate to be signed by its duly authorized officers.

John J. Alan
John J. Alan
President and Chief Executive Officer

William Tanner
William Tanner
Chief Financial Officer



DATED: 00MM-YYYY

COUNTERSIGNED AND REGISTERED
COMPUSSHARE TRUST COMPANY, N.A.
TRANSFER AGENT AND REGISTRAR

By _____
AUTHORIZED SIGNATURE

SECURITY INSTRUCTIONS ON REVERSE

1234567

DESCRIPTION OF CAPITAL STOCK

The following description of the capital stock of CervoMed Inc. (“us,” “our,” “we,” “CervoMed,” or the “Company”) is a summary of certain rights of holders of our capital stock and certain provisions of our certificate of incorporation, as amended (the “Charter”), and our bylaws, as amended (the “Bylaws”), in each case, as currently in effect. This summary does not purport to be complete and is qualified in its entirety by the provisions of our Charter and our Bylaws, each previously filed with the U.S. Securities and Exchange Commission (the “SEC”) and incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.13 is a part, as well as to the applicable provisions of the Delaware General Corporation Law (as amended, the “DGCL”). We encourage you to read our Charter, our Bylaws and the applicable portions of the DGCL carefully.

Capitalization

The Company’s authorized capital stock consists of 1,000,000,000 shares of common stock, par value \$0.001 per share (“Common Stock”), and 30,000,000 shares of preferred stock, par value \$0.001 per share, all of which remains undesignated.

Common Stock

The following description is based on relevant portions of the DGCL and our Charter. This summary is a description of the material terms of, and is qualified in its entirety by, reference to the Charter.

Authorized. The Company is authorized to issue 1,000,000,000 shares of Common Stock. We may, from time-to-time, amend our Charter to increase the number of authorized shares of Common Stock. Any such amendment would require the approval of the holders of a majority of the voting power of the shares entitled to vote thereon.

Voting Rights. For all matters submitted to a vote of stockholders, each holder of Common Stock is entitled to one vote for each share registered in the holder’s name on the Company’s books. Our Common Stock does not have cumulative voting rights. Pursuant to our Bylaws, at all meetings of stockholders, except where otherwise provided by law, our Charter, or our Bylaws, the presence, virtually or by proxy duly authorized, of the holders of 33.4% of the outstanding shares of Common Stock entitled to vote constitutes a quorum for the transaction of business. Except as otherwise provided by law, our Charter or our Bylaws, in all matters other than the election of directors, the affirmative vote of the majority of shares of Common Stock present virtually or by proxy at the meeting and entitled to vote generally on the subject matter shall be the act of the stockholders. Except as otherwise provided by law, our Charter or our Bylaws, directors are elected by a plurality of the votes of the shares of Common Stock present virtually or by proxy at the meeting and entitled to vote generally on the election of directors.

Dividends. Subject to limitations under Delaware law and any preferences that may be applicable to any then outstanding preferred stock, holders of Common Stock are entitled to receive ratably those dividends, if any, as may be declared by our board of directors out of legally available funds.

Liquidation. Upon the Company’s liquidation, dissolution or winding up, the holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities of the company, subject to any prior rights of any preferred stock then outstanding.

Fully Paid and Non-assessable. All shares of outstanding Common Stock are fully paid and non-assessable and any additional shares of Common Stock that the Company issues will be fully paid and non-assessable.

Other Rights and Restrictions. Holders of our Common Stock do not have preemptive or subscription rights, and they have no right to convert their Common Stock into any other securities. There are no redemption or sinking fund provisions applicable to our Common Stock. The rights, preferences and privileges of common stockholders are subject to the rights of the stockholders of any series of preferred stock which the Company may designate in the future. Neither our Charter nor our Bylaws restrict the ability of a holder of our Common Stock to transfer the holder’s shares of Common Stock.

Listing. Our Common Stock is quoted on the Nasdaq Capital Market under the symbol “CRVO.”

Transfer Agent and Registrar. The transfer agent and registrar for our Common Stock is Computershare Trust Company, N.A.

Preferred Stock

Our Charter authorizes our board of directors to provide for the issuance of up to 30,000,000 shares of preferred stock in one or more series. Our board of directors is authorized to classify or reclassify any unissued portion of our authorized shares of preferred stock to provide for the issuance of shares of other classes or series, including preferred stock in one or more series. The Company may issue preferred stock from time to time in one or more classes or series, with the exact terms of each class or series established by our board. Without seeking stockholder approval, our board of directors may issue preferred stock with voting and other rights that could adversely affect the voting power of the holders of our Common Stock. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our Common Stock.

The rights, preferences, privileges and restrictions of the preferred stock of each series will be fixed by the certificate of designation relating to each series, which will specify the terms of the preferred stock, including, but not limited to:

- the distinctive designation and the maximum number of shares in the series;
- the terms on which dividends, if any, will be paid;
- the voting rights, if any, on the shares of the series;
- the terms and conditions, if any, on which the shares of the series shall be convertible into, or exchangeable for, shares of any other class or classes of capital stock;
- the terms on which the shares may be redeemed, if at all;
- the liquidation preference, if any; and
- any or all other preferences, rights, restrictions, including restrictions on transferability, and qualifications of shares of the series.

The issuance of preferred stock may delay, deter or prevent a change in control. No shares of preferred stock are issued or outstanding, and the Company has no present plan to issue any shares of preferred stock.

Anti-Takeover Provisions of our Charter, our Bylaws and Delaware Law

Our Charter and our Bylaws impose certain anti-takeover provisions and make the Delaware Chancery Court the exclusive forum for certain stockholder actions, which may make the acquisition of the Company, a proxy contest, or the nomination of a director candidate by a stockholder more difficult than such actions would be in the absence of such provisions. These provisions include the items described below.

Filling Vacancies

Our Bylaws provide that only our board of directors has the right to fill a vacancy on the board of directors created by an expansion or by the resignation, death, or removal of a director, which prevents stockholders from being able to fill vacancies on the board of directors.

Meetings of Stockholders

Our Bylaws provide that only the Chair of our board of directors, our Chief Executive Officer, or a majority of our directors are authorized to call a special meeting of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our Bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Preferred Stock

Our charter provides for 30,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of the Company's stockholders, our board of directors may issue undesignated preferred stock without stockholder approval in one or more private offerings or other transactions, the terms of which may be established and shares of which may be issued without stockholder approval (notwithstanding any requirements imposed by the SEC or any exchange on which our Common Stock may now or in the future trade), which may include rights superior to the rights of the holders of our Common Stock and which may dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our Charter grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of our Common Stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of the Company.

Amendment to Our Bylaws

Our Bylaws may be amended, restated, or repealed by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the Bylaws, and may also be amended by the affirmative vote of 66 2/3% of the outstanding shares entitled to vote on the amendment.

Advance Notice Requirements

Our Bylaws establish advance notice procedures with respect to any nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at any meeting of stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to the Company's Secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at the Company's principal executive offices not less than 90 days (or, if the Company calls a special meeting of stockholders for the purpose of electing one or more directors to its board of directors, not later than the 10th day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by our board of directors to be elected at such meeting) nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our Bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Choice of Forum

Our Bylaws provide that, unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for certain actions, including derivative actions brought on the Company's behalf, stockholder actions claiming breaches of a fiduciary duty owed by any of our directors or officers, and claims arising under our organizational documents, in each case, subject to said Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein. Although this provision would not apply to any stockholder claims under the Securities Exchange Act of 1934, as amended, there is uncertainty regarding whether a court would enforce such a forum selection provision as written to stockholder claims under the Securities Act of 1933, as amended. Nevertheless, this forum selection provision may limit our stockholders' ability to obtain a favorable judicial forum for disputes with the Company or its directors, officers, employees, or agents, which may discourage lawsuits against the Company and such persons. The limitations on certain stockholder rights imposed by these provisions could also depress the trading price of our Common Stock.

Delaware Anti-Takeover Law

The Company is subject to Section 203 of the DGCL. Section 203 generally prohibits a public Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers of the corporation and (b) shares issued under employee stock plans under which employee participants do not have the right to determine whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of its stock owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.



STOCK OPTION AGREEMENT

This STOCK OPTION AGREEMENT (this "**Agreement**") is entered into and effective as of [____], 202[] (the "**Grant Date**") by and between Cervomed Inc., a Delaware corporation (the "**Company**"), and [____] ("**Optionee**").

A. The Company has adopted (i) EIP Pharma Inc. 2018 Employee, Director and Consultant Equity Incentive Plan (as such plan may be amended from time to time, the "**Plan**") and (ii) the Cervomed Inc. 2015 Equity Incentive Plan (as such plan may be amended from time to time, the "**2015 Plan**"), in each case, authorizing the Board of Directors (the "**Board**") of the Company, or a committee as provided for in the Plan (the Board or such a committee to be referred to as the "**Committee**"), to grant stock options, among other incentive awards, to certain individuals.

B. The Company desires to grant a non-qualified stock option to purchase shares of common stock, par value \$0.001 per share, of the Company (the "**Common Stock**") to Optionee pursuant to the Plan.

C. All of the capitalized terms used in this Agreement not otherwise defined in this Agreement have the same respective meanings as defined in the 2015 Plan.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the Company and Optionee agree as follows:

1. Grant of Option; Exercise Price. The Company hereby grants to Optionee, upon the terms and subject to the conditions set forth in this Agreement and the Plan, and effective as of the Grant Date, an option (the "**Option**") to purchase all or any portion of [____] shares (the "**Option Shares**") of the Company's Common Stock, at an exercise price of \$[____] per share, which represents 100% of the Fair Market Value of a share of Common Stock on the Grant Date, as determined in accordance with the Plan (such exercise price, as adjusted from time to time pursuant to Section 5 of this Agreement and the Plan, the "**Exercise Price**"). The Option is not intended to be an "incentive stock option," as that term is used in Section 422 of the Internal Revenue Code of 1986, as amended (the "**Code**").

2. Vesting. The option will vest and become exercisable in [] equal (or as nearly equal as possible) installments on the last calendar day of each month over a []-month period beginning on [____].

3. Exercise of Option.

3.1. **Notice; Payment.** Subject to the terms and conditions set forth in this Agreement, including vesting of the Option in Section 2 of this Agreement and termination of the Option in Section 4 of this Agreement, and the Plan, the Option may be exercised, in whole or in part, at any time and from time to time, by delivery to the Company of written notice of the exercise of the Option, in substantially the form as provided by the Company, stating the number of Option Shares being purchased (the "**Purchased Shares**"), and accompanied by payment in full of the total aggregate Exercise Price of the Purchased Shares. The Exercise Price shall be payable in full in any one of the following alternative forms:

- a) Full payment in cash, personal check or certified bank or cashier's check;
- b) Any broker assisted cashless exercise procedure which is acceptable to the Company;
- c) Cashless net exercise.

$$X = Y - [(A)(YB)]$$

Where: X = the number of shares of Common Stock to be issued to Optionee.

Y = the number of Purchased Shares.

A = the Exercise Price.

B = the Fair Market Value of one share of Common Stock on the date of exercise.

3.2. **Issuance of Purchased Shares; No Fractional Shares.** Following receipt of the exercise notice and the payment referred to above (or upon a cashless net exercise), Optionee shall receive the number of shares of Common Stock equal to a number (as determined below) of shares of Common Stock computed using the following formula: and the payment referred to above, the Company shall, as soon as reasonably practicable thereafter, cause certificates (or book-entry notations) representing the Purchased Shares (or such fewer number of Purchased Shares if a cashless net exercise is used) to be delivered to Optionee either at Optionee's address set forth in the records of the Company or at such other address as Optionee may designate in writing to the Company or issue and deposit the Purchased Shares for Optionee's benefit with any broker with which Optionee has an account relationship or the Company has engaged to provide such services under the Plan; provided, however, that the Company shall not be obligated to issue a fraction or fractions of a share otherwise issuable upon exercise of the Option, and may pay to Optionee, in cash or cash equivalent, the Fair Market Value of any such fraction or fractions of a share as of the date of exercise. If requested by the Company in connection with any exercise of the Option, Optionee shall also deliver this Agreement to the Company, which shall endorse hereon a notation of the exercise and, and if the Option is exercised in part, shall return this Agreement to Optionee. The date of exercise of an Option that is validly exercised shall be deemed to be the date on which there shall have been delivered to the Company the notice referred to in Section 3.1 of this Agreement and full payment of the Exercise Price of the Purchased Shares. Optionee shall not be deemed to be a holder of any Purchased Shares pursuant to exercise of the Option until the date of issuance of a stock certificate or book-entry notation to Optionee for such shares following payment in full for the Purchased Shares.

3.3. Tax Withholding. The Company is entitled to (a) withhold and deduct from future wages of Optionee (or from other amounts that may be due and owing to Optionee from the Company or a Subsidiary), or make other arrangements for the collection of, all amounts the Company reasonably determines are necessary to satisfy any and all federal, foreign, state and local withholding and employment related tax requirements attributable to the Option, including, without limitation, the grant, exercise or vesting of, the Option; (b) withhold cash paid or payable or shares of Common Stock from the shares issued or otherwise issuable to Optionee in connection with the Option; or (c) require Optionee promptly to remit the amount of such withholding to the Company before taking any action, including issuing any shares of Common Stock, with respect to the Option. Shares of Common Stock issued or otherwise issuable to Optionee in connection with the Option that gives rise to the tax withholding obligation that are withheld for purposes of satisfying Optionee's withholding or employment-related tax obligation will be valued at their Fair Market Value on the Tax Date.

3.4. Remaining Option Shares. Option Shares will no longer be outstanding under the Option (and will therefore not thereafter be exercisable) following the exercise of the Option to the extent of (a) shares used to pay the Exercise Price of an Option under the "cashless net exercise" method (b) shares actually delivered to Optionee as a result of such exercise and (c) any shares withheld for purposes of tax withholding.

4. Termination of Option.

4.1. Time of Termination. Except as provided in this Section 4 and Section 5 of this Agreement, the Option shall terminate, no longer be exercisable and expire at 5:00 p.m., Eastern Time, on [] (the "**Time of Termination**").

4.2. Termination for Cause. In the event Optionee's employment (in the event that Optionee is an Employee) or other service (in the event that Optionee is a Consultant) with the Company and all Subsidiaries is terminated by the Company for Cause, the Option will immediately terminate without notice of any kind, and the Option will no longer be exercisable.

4.3. Termination Due to Death, Disability or Retirement. In the event Optionee's employment (in the event that Optionee is an Employee) or other service (in the event that Optionee is a Consultant) with the Company and all Subsidiaries is terminated by reason of Optionee's death, Disability or Retirement, the Option will remain exercisable, to the extent exercisable as of the date of such termination, for a period of one (1) year after such termination (but in no event after the Time of Termination).

4.4. Termination for Other Reasons. In the event Optionee's employment (in the event that Optionee is an Employee) or other service (in the event that Optionee is a Consultant) with the Company and all Subsidiaries is terminated for any other reason, the Option will, to the extent exercisable as of such termination, remain exercisable for a period of three (3) months after such termination (but in no event after the Time of Termination).

4.5. Effect of Actions Constituting Cause or Adverse Action. Notwithstanding anything in this Agreement to the contrary and in addition to the rights of the Committee under the Plan, if Optionee is determined by the Committee, acting in its sole discretion, to have taken any action that would constitute Cause or an Adverse Action during or after the termination of employment or other service with the Company or a Subsidiary, irrespective of whether such action or the Committee's determination occurs before or after termination of Optionee's employment or other service with the Company or any Subsidiary and irrespective of whether or not Optionee was terminated as a result of such Cause or Adverse Action, (a) all rights of Optionee under the Option and this Agreement will terminate and be forfeited without notice of any kind, and (b) the Committee in its sole discretion will have the authority to rescind the exercise, vesting, settlement or issuance of, or payment in respect of, the Option that was exercised, vested, settled or issued, or as to which such payment was made, and to require Optionee to pay to the Company, within ten (10) days of receipt from the Company of notice of such rescission, any amount received or the amount of any gain realized as a result of such rescinded exercise, vesting, settlement, issuance or payment (including any dividends paid or other distributions made with respect to any shares of Common Stock subject to the Option). The Company may defer the exercise of the Option for a period of up to six (6) months after receipt of Optionee's written notice of exercise or the issuance of Purchased Shares upon the vesting of the Option for a period of up to six (6) months after the date of such vesting in order for the Committee to make any determination as to the existence of Cause or an Adverse Action. The Company will be entitled to withhold and deduct from future wages of Optionee (or from other amounts that may be due and owing to Optionee from the Company or a Subsidiary) or make other arrangements for the collection of all amounts necessary to satisfy such payment obligations. This Section 4.5 will not apply to the Option following a Change in Control.

4.6. Clawback/Forfeiture. The Option and Option Shares issued or issuable pursuant to the Option are subject to forfeiture or clawback by the Company to the extent required and allowed by law, including the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and the Sarbanes Oxley Act of 2002 and any implementing rules and regulations promulgated thereunder, and pursuant to any forfeiture, clawback or similar policy of the Company, as such laws, rules, regulations and policy may be in effect from time to time.

5. Adjustments. In the event of any reorganization, merger, consolidation, recapitalization, liquidation, reclassification, stock dividend, stock split, combination of shares, rights offering, divestiture, or extraordinary dividend (including a spin-off), or any other similar change in the corporate structure or shares of the Company, the Committee (or, if the Company is not the surviving corporation in any such transaction, the board of directors of the surviving corporation), will make appropriate adjustment (which determination will be conclusive) as to the number and kind of securities or other property (including cash) subject to, and the Exercise Price of, the Option in order to prevent dilution or enlargement of the rights of Optionee.

6. Change in Control. The Option shall become immediately vested and exercisable upon completion of a Change in Control and remain exercisable through the Time of Termination regardless of whether Optionee remains in the employment or service of the Company. Notwithstanding any of the foregoing, in connection with a Change in Control, the Committee, in its sole discretion, at any time after the grant of the Option, may take whatever action it deems appropriate pursuant to the Plan.
7. Rights as a Stockholder. Optionee will have no rights as a stockholder of the Company unless and until all conditions to the effective exercise of the Option (including, without limitation, the conditions set forth in Section 3 of this Agreement) have been satisfied and Optionee has become the holder of record of such shares. No adjustment will be made for dividends or distributions with respect to the Option as to which there is a record date preceding the date Optionee becomes the holder of record of such shares, except as may otherwise be provided in the Plan or determined by the Committee in its sole discretion.
8. Restrictions on Transfer. Except pursuant to testamentary will or the laws of descent and distribution or as otherwise expressly permitted by the Plan, no right or interest of Optionee in the Option prior to exercise may be assigned or transferred, or subjected to any lien, during the lifetime of Optionee, either voluntarily or involuntarily, directly or indirectly, by operation of law or otherwise. Optionee, however, will be entitled to designate a beneficiary to receive the Option upon Optionee's death, and, in the event of Optionee's death, exercise of the Option (to the extent permitted pursuant to Sections 2 and 4 of this Agreement) may be made by Optionee's legal representatives, heirs and legatees.
9. Market Stand-off. Optionee, if so requested by the Company or any representative of the underwriters in connection with a firmly underwritten public offering of securities by the Company pursuant to a registration statement under the Securities Act following the date of this Agreement, shall not sell or otherwise transfer any Option Shares during the 180-day period following the effective date of such registration statement. The Company may impose stop-transfer instructions with respect to securities subject to the foregoing restriction until the end of such 180-day period. This Section 9 will not apply to the sale of any Option Shares to an underwriter pursuant to an underwriting agreement and shall only be applicable to Optionee if all then current executive officers and directors of the Company enter into similar agreements.
10. Employment or Service. Nothing in this Agreement or the Plan will interfere with or limit in any way the right of the Company or any Subsidiary to terminate the employment or service of Optionee at any time, nor confer upon Optionee any right to continue in the employment or other service with the Company or any Subsidiary.
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11. Option Subject to Plan. The Option and the Option Shares granted and issued pursuant to this Agreement have been granted and issued under, and are subject to the terms of, the Plan. The terms of the Plan are incorporated by reference in this Agreement in their entirety, and Optionee, by execution of this Agreement, acknowledges having received a copy of the Plan. The provisions of this Agreement will be interpreted as to be consistent with the Plan, and any ambiguities in this Agreement will be interpreted by reference to the Plan. In the event that any provision of this Agreement is inconsistent with the terms of the Plan, the terms of the Plan will prevail. All of the capitalized terms used in this Agreement not otherwise defined in this Agreement have the same respective meanings as defined in the Plan.

12. General Provisions.

12.1. Governing Law; Venue. This Agreement and all rights and obligations under this Agreement will be governed by and construed exclusively in accordance with the laws of the State of Delaware, notwithstanding the conflicts of laws principles of any jurisdictions. By acceptance of the Option, Optionee is deemed to submit to the exclusive jurisdiction and venue of the federal or state courts of the State of Illinois to resolve any and all issues that may arise out of or relate to the Option or this Agreement.

12.2. Entire Agreement. This Agreement and the Plan set forth the entire agreement and understanding of the parties to this Agreement with respect to the grant and exercise of the Option and the administration of the Plan and supersede all prior agreements, arrangements, plans, and understandings relating to the grant and exercise of the Option and the administration of the Plan.

12.3. Failure to Enforce Not a Waiver. The failure of the Company or Optionee to enforce at any time any provision of this Agreement shall in no way be construed to be a waiver of such provision or of any other provision hereof.

12.4. Notices. All notices, requests, demands and other communications (collectively, "**Notices**") given pursuant to this Agreement shall be in writing, and shall be delivered by personal service, courier, facsimile transmission, email transmission of a pdf format data file or by United States first class, registered or certified mail, postage prepaid, addressed to the party at the address set forth on the signature page of this Agreement. Any Notice, other than a Notice sent by registered or certified mail, shall be effective when received; a Notice sent by registered or certified mail, postage prepaid return receipt requested, shall be effective on the earlier of when received or the third day following deposit in the United States mails. Any party may from time to time change its address for further Notices hereunder by giving notice to the other party in the manner prescribed in this Section 12.4.

12.5. Successors and Assigns. Except to the extent specifically limited by the terms and provision of this Agreement, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, assigns, heirs, and personal representatives.

12.6. Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by email delivery of a "pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or "pdf" signature page were an original thereof.

12.7. Titles, Captions and Sections. Titles and captions contained in this Agreement are inserted for convenience of reference only and do not constitute a part of this Agreement for any other purpose. References to Sections in this Agreement refer to Sections of this Agreement unless otherwise stated.

12.8. Nature of the Grant. In accepting the Option and by execution of this Agreement, Optionee acknowledges that:

- a) The Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended, or terminated by the Company in its sole discretion at any time, unless otherwise provided in the Plan.
 - b) The grant of the Option is voluntary and occasional and does not create any contractual or other right to receive future Option grants, or benefits in lieu of Option grants, even if Option grants have been granted repeatedly in the past.
 - c) All decisions with respect to future Option grants, if any, will be at the sole discretion of the Company.
 - d) Optionee is voluntarily participating in the Plan.
 - e) The Option grant is not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments and in no event shall be considered as compensation for, or relating in any way to, past services for the Company.
 - f) In the event that Optionee is not an employee of the Company, the Option will not be interpreted to form an employment contract or relationship with the Company.
 - g) The future value of the Common Stock is unknown and cannot be predicted with certainty and if the Option vests and Optionee exercises the Option in accordance with the terms of this Agreement and is issued Purchased Shares, the value of those shares may increase or decrease.
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- h) In consideration of the grant of the Option, no claim or entitlement to compensation or damages shall arise from termination of the Option or diminution in value of the Option or Purchased Shares acquired upon exercise of the Option resulting from termination of Optionee's employment or service by the Company (for any reason whatsoever and whether or not in breach of local labor laws) and Optionee irrevocably releases the Company and its Subsidiaries, and their respective directors, officers, employees and agents, from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, then, by acceptance of the Option and execution of this Agreement, Optionee shall be deemed irrevocably to have waived his or her entitlement to pursue such claim.
- i) The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Optionee's participation in the Plan, or Optionee's purchase or sale of the underlying Option Shares.
- j) Optionee is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan or the Option.

[Remainder of page intentionally left blank; Signature page follows]

IN WITNESS WHEREOF, the parties to this Agreement have executed this Agreement effective as of the Grant Date.

OPTIONEE:

CERVOMED INC.

Name: [_____]

By: [_____]

Title: [_____]

Address: 20 Park Plaza, Suite 424

Boston, MA 02116

By execution of this Agreement, Optionee acknowledges having received a copy of each of the Plan and the 2015 Plan.

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (the “**Agreement**”) is made and entered into this []th day of [], 202[], by and between CervoMed Inc., a Delaware corporation (the “**Company**,” which term shall include, where appropriate, any Entity (as hereinafter defined) controlled directly or indirectly by the Company), and [] (the “**Indemnitee**”).

WHEREAS, it is essential to the Company that it be able to retain and attract as directors and officers the most capable persons available;

WHEREAS, increased corporate litigation has subjected directors and officers to litigation risks and expenses, and the limitations on the availability of directors and officers liability insurance have made it increasingly difficult for the Company to attract and retain such persons;

WHEREAS, the Company’s Certificate of Incorporation, as amended, and Bylaws (the “**Certificate**” and the “**Bylaws**,” respectively), provide that the Company is authorized to indemnify its directors and officers to the fullest extent permissible by applicable law and permit it to make other indemnification arrangements and agreements;

WHEREAS, the Company desires to provide Indemnitee with specific contractual assurance of Indemnitee’s rights to full indemnification against litigation risks and expenses (regardless, among other things, of any amendment to or revocation of the Certificate or Bylaws or any change in the ownership of the Company or the composition of its board of directors (the “**Board of Directors**”));

WHEREAS, the Company intends that this Agreement provide Indemnitee with greater protection than that which is provided by the Certificate and Bylaws; and

WHEREAS, Indemnitee is relying upon the rights afforded under this Agreement in becoming or continuing as a director and/or officer of the Company.

NOW, THEREFORE, in consideration of the promises and the covenants contained herein, the Company and Indemnitee do hereby covenant and agree as follows:

1. Definitions.

(a) “**Corporate Status**” describes the status of a person who is serving or has served (i) as a director and/or officer of the Company, (ii) in any capacity with respect to any employee benefit plan of the Company or (at the request of the Company) any employee benefit plan of any other Entity, or (iii) as a director and/or officer of any other Entity at the request of the Company. For purposes of subsections (ii) and (iii) of this Section 1(a), if Indemnitee is serving or has served as a director and/or officer of a Subsidiary (as defined below), or in any capacity with respect to any employee benefit plan of a Subsidiary, Indemnitee shall be deemed to be serving at the request of the Company. If Indemnitee is an employee of the Company, Corporate Status shall not include actions taken by Indemnitee in any capacity other than as a director and/or officer or as a representative of any employee benefit plan.

(b) “**Entity**” shall mean any corporation, partnership, limited liability company, joint venture, trust, foundation, association, organization or other legal entity.

(c) “**Expenses**” shall mean all fees, costs and expenses incurred by Indemnitee in connection with any Proceeding (as defined below), including, without limitation, reasonable attorneys’ fees, disbursements and retainers (including, without limitation, any such fees, disbursements and retainers incurred by Indemnitee pursuant to Sections 11 and 12(c) of this Agreement), fees and disbursements of expert witnesses, private investigators and professional advisors (including, without limitation, accountants and investment bankers), court costs, transcript costs, fees of experts, travel expenses, duplicating, printing and binding costs, telephone and fax transmission charges, postage, delivery services, secretarial services and other disbursements and expenses.

(d) “**Indemnifiable Expenses**,” “**Indemnifiable Liabilities**” and “**Indemnifiable Amounts**” shall have the meanings ascribed to those terms in Section 3(a) below.

(e) “**Liabilities**” shall mean judgments, damages, liabilities, losses, penalties, excise taxes, fines and amounts paid in settlement.

(f) “**Proceeding**” shall mean any threatened, pending or completed claim, action, suit, arbitration, alternate dispute resolution process, investigation, administrative hearing, appeal or any other proceeding, whether civil, criminal, administrative, arbitrative or investigative, whether formal or informal, including a proceeding initiated by Indemnitee pursuant to Section 11 of this Agreement to enforce Indemnitee’s rights hereunder.

(g) “**Subsidiary**” shall mean any corporation, partnership, limited liability company, joint venture, trust or other Entity of which the Company owns (either directly or through or together with another Subsidiary of the Company) either (i) a general partner, managing member or other similar interest or (ii) (A) 50% or more of the voting power of the voting capital equity interests of such corporation, partnership, limited liability company, joint venture or other Entity or (B) 50% or more of the outstanding voting capital stock or other voting equity interests of such corporation, partnership, limited liability company, joint venture or other Entity.

(h) “**to the fullest extent permissible by applicable law**” shall include, but not be limited to: (i) the fullest extent permitted by the provisions of the General Corporation Law of the State of Delaware (the “**DGCL**”) that authorize or contemplate additional or supplementary indemnification by agreement, or the corresponding provisions of any amendment to or replacement of the DGCL or such provisions thereof; and (ii) the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its directors and/or officers.

2. **Services of Indemnitee.** In consideration of the Company’s covenants and commitments hereunder, Indemnitee agrees to serve or continue to serve as a director and/or officer of the Company. However, this Agreement shall not impose any obligation on Indemnitee or the Company to continue Indemnitee’s service to the Company beyond any period otherwise required by law or by other agreements or commitments of the parties, if any.

3. **Agreement to Indemnify.** The Company agrees to hold harmless and indemnify Indemnitee to the fullest extent permissible by applicable law as follows:

(a) **Proceedings.** Subject to the exceptions contained in Section 4(a) below, if Indemnitee was or is a party or is threatened to be made a party to any Proceeding by reason of Indemnitee’s Corporate Status, Indemnitee shall be indemnified by the Company against all Expenses and Liabilities actually and reasonably incurred or paid by Indemnitee in connection with such Proceeding (referred to herein as “**Indemnifiable Expenses**” and “**Indemnifiable Liabilities**,” respectively, and collectively as “**Indemnifiable Amounts**”).

(b) **Conclusive Presumption Regarding Standard of Care.** In making any determination required to be made under Delaware law with respect to entitlement to indemnification hereunder, the person, persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement if Indemnitee submitted a request therefor in accordance with Section 5 of this Agreement, and the Company shall have the burden of proof to overcome that presumption in connection with the making by any person, persons or Entity of any determination contrary to that presumption.

4. **Exceptions to Indemnification.** Subject to Section 20 below, Indemnitee shall be entitled to indemnification under Section 3(a) above in all circumstances and with respect to each and every specific claim, issue or matter involved in the Proceeding out of which Indemnitee’s claim for indemnification has arisen to the fullest extent permissible by applicable law, except as follows:

(a) **Proceedings.** If indemnification is requested under Section 3(a) and it has been finally adjudicated by a court of competent jurisdiction that, in connection with such specific claim, issue or matter, Indemnitee failed to act (i) in good faith and (ii) in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, or, with respect to any criminal Proceeding, Indemnitee had reasonable cause to believe that Indemnitee’s conduct was unlawful, Indemnitee shall not be entitled to payment of Indemnifiable Amounts hereunder to the extent that they arise out of such claim, issue or matter.

(b) Insurance Proceeds. To the extent payment is actually made to the Indemnitee under a valid and collectible insurance policy maintained at the expense of the Company in respect of Indemnifiable Amounts in connection with such specific claim, issue or matter, Indemnitee shall not be entitled to payment of Indemnifiable Amounts hereunder except in respect of any excess of such Indemnifiable Amounts beyond the amount of payment under such insurance.

5. Procedure for Payment of Indemnifiable Amounts. Indemnitee shall submit to the Company a written request specifying the Indemnifiable Amounts for which Indemnitee seeks payment under Section 3 of this Agreement and the basis for the claim. The Company shall pay such Indemnifiable Amounts to Indemnitee promptly, but in no event later than thirty (30) calendar days after receipt of such request. At the request of the Company, Indemnitee shall furnish such documentation and information as are reasonably available to Indemnitee and necessary to establish that Indemnitee is entitled to indemnification hereunder.

6. Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Agreement, and without limiting any such provision, to the extent that Indemnitee is, by reason of Indemnitee's Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, Indemnitee shall be indemnified to the fullest extent permissible by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify to the fullest extent permissible by applicable law Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Agreement, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, by reason of settlement, judgment, order or otherwise, shall be deemed to be a successful result as to such claim, issue or matter.

7. Effect of Certain Resolutions. Neither the settlement nor termination of any Proceeding nor the failure of the Company to award indemnification or to determine that indemnification is payable shall create a presumption that Indemnitee is not entitled to indemnification hereunder. In addition, the termination of any Proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent shall not create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, had reasonable cause to believe that Indemnitee's action was unlawful.

8. Agreement to Advance Expenses; Undertaking. The Company shall advance to the fullest extent permissible by applicable law all Expenses actually and reasonably incurred by or on behalf of Indemnitee in connection with any Proceeding in which Indemnitee is involved by reason of such Indemnitee's Corporate Status within thirty (30) calendar days after the receipt by the Company of a written statement from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Advances shall be unsecured and interest free. Advances shall be made without regard to Indemnitee's ability to repay the expenses and without regard to Indemnitee's ultimate entitlement to indemnification under the other provisions of this Agreement. To the extent required by Delaware law, Indemnitee hereby undertakes to repay any and all of the amount of Indemnifiable Expenses paid to Indemnitee if it is finally determined by a court of competent jurisdiction that Indemnitee is not entitled under this Agreement to indemnification with respect to such Expenses. This undertaking is an unlimited general obligation of Indemnitee.

9. Procedure for Advance Payment of Expenses. Indemnitee shall submit to the Company a written request specifying the Indemnifiable Expenses for which Indemnitee seeks an advancement under Section 8 of this Agreement, together with documentation evidencing that Indemnitee has incurred such Indemnifiable Expenses.

10. Indemnification for Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his or her Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, he or she shall be indemnified to the fullest extent permissible by applicable law against all Expenses actually and reasonably incurred by him or her or on his or her behalf in connection therewith.

11. Remedies of Indemnitee.

(a) Right to Petition Court. In the event that Indemnitee makes a request for payment of Indemnifiable Amounts under Sections 3 and 5 above or a request for an advancement of Indemnifiable Expenses under Sections 8 and 9 above and the Company fails to make such payment or advancement in a timely manner pursuant to the terms of this Agreement, Indemnitee may petition the Court of Chancery of the State of Delaware to enforce the Company's obligations under this Agreement.

(b) Burden of Proof. In any judicial proceeding brought under Section 11(a) above, the Company shall have the burden of proving that Indemnitee is not entitled to payment of Indemnifiable Amounts hereunder.

(c) Expenses. The Company agrees to reimburse Indemnitee in full for any Expenses in connection with any Proceeding incurred by Indemnitee in connection with investigating, preparing for, litigating, defending or settling any action brought by Indemnitee under Section 11(a) above, or in connection with any claim or counterclaim brought by the Company in connection therewith, whether or not Indemnitee is successful in whole or in part in connection with any such action, except to the extent that it has been finally adjudicated by a court of competent jurisdiction that such reimbursement would be unlawful.

(d) Failure to Act Not a Defense. The failure of the Company (including its Board of Directors or any committee thereof, independent legal counsel or stockholders) to make a determination concerning the permissibility of the payment of Indemnifiable Amounts or the advancement of Indemnifiable Expenses under this Agreement shall not be a defense in any action brought under Section 11(a) above, and shall not create a presumption that such payment or advancement is not permissible.

12. Defense of the Underlying Proceeding.

(a) Notice by Indemnitee. Indemnitee agrees to notify the Company promptly upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding which may result in the payment of Indemnifiable Amounts or the advancement of Indemnifiable Expenses hereunder; provided, however, that the failure to give any such notice shall not disqualify Indemnitee from the right, or otherwise affect in any manner any right of Indemnitee, to receive payments of Indemnifiable Amounts or advancements of Indemnifiable Expenses unless the Company's ability to defend in such Proceeding is materially and adversely prejudiced thereby.

(b) Defense by Company. Subject to the provisions of the last sentence of this Section 12(b) and of Section 12(c) below, the Company shall have the right to defend Indemnitee in any Proceeding which may give rise to the payment of Indemnifiable Amounts hereunder; provided, however, that the Company shall notify Indemnitee of any such decision to defend within ten (10) calendar days of the Company's receipt of notice of any such Proceeding under Section 12(a) above. The Company shall not, without the prior written consent of Indemnitee, consent to the entry of any judgment against Indemnitee or enter into any settlement or compromise which (i) includes an admission of fault of Indemnitee or (ii) does not include, as an unconditional term thereof, the full release of Indemnitee from all liability in respect of such Proceeding, which release shall be in form and substance reasonably satisfactory to Indemnitee. This Section 12(b) shall not apply to a Proceeding brought by Indemnitee under Section 11(a) above or pursuant to Section 20 below.

(c) Indemnitee's Right to Counsel. Notwithstanding the provisions of Section 12(b) above, in any Proceeding to which Indemnitee is a party by reason of Indemnitee's Corporate Status, at the Indemnitee's option Indemnitee shall have the right to retain counsel of Indemnitee's choice, at the expense of the Company, to represent Indemnitee in connection with any such matter and the Expenses incurred by Indemnitee in any such matter shall constitute Indemnifiable Expenses.

13. Representations and Warranties of the Company. The Company hereby represents and warrants to Indemnitee as follows:

(a) Authority. The Company has all necessary power and authority to enter into, and be bound by the terms of, this Agreement, and the execution, delivery and performance of the undertakings contemplated by this Agreement have been duly authorized by the Company.

(b) Enforceability. This Agreement, when executed and delivered by the Company in accordance with the provisions hereof, shall be a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or similar laws affecting the enforcement of creditors' rights generally.

14. Insurance. The Company shall, from time to time, make the good faith determination whether or not it is practicable for the Company to obtain and maintain a policy or policies of insurance with a reputable insurance company providing the Indemnitee with coverage for losses from wrongful acts. For so long as Indemnitee shall have Corporate Status, Indemnitee shall be named as an insured in all policies of director and officer liability insurance in such a manner as to provide Indemnitee the same rights and benefits as are accorded to the most favorably insured of the Company's officers and directors. If, at the time of the receipt of a notice of a claim pursuant to the terms of this Agreement, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies. Notwithstanding the foregoing, the Company shall have no obligation to obtain or maintain such insurance if the Company determines in good faith that such insurance is not reasonably available, if the premium costs for such insurance are disproportionate to the amount of coverage provided, or if the coverage provided by such insurance is limited by exclusions so as to provide an insufficient benefit.

15. No Duplication of Payments. The Company shall not be liable under this Agreement to make any payment in connection with any claim made against Indemnitee to the extent Indemnitee has otherwise actually received payment under any insurance policy, provision of the Certificate or the Bylaws or otherwise of the amounts otherwise indemnifiable hereunder. The Company's obligation to indemnify or advance Expenses hereunder to Indemnitee as a result of the Indemnitee's Corporate Status with an Entity other than the Company shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of Expenses from such other Entity.

16. Contract Rights Not Exclusive. The rights to payment of Indemnifiable Amounts and advancement of Indemnifiable Expenses provided by this Agreement shall be in addition to, but not exclusive of, any other rights which Indemnitee may have at any time under applicable law, the Certificate or Bylaws, or any other agreement, vote of stockholders or directors (or a committee of directors) or otherwise, both as to action in Indemnitee's official capacity and as to action in any other capacity as a result of Indemnitee's serving as a director of the Company.

17. Successors. This Agreement shall be (a) binding upon all successors and assigns of the Company (including any transferee of all or a substantial portion of the business, stock and/or assets of the Company and any direct or indirect successor by merger or consolidation or otherwise by operation of law) and (b) binding on and shall inure to the benefit of the heirs, personal representatives, executors and administrators of Indemnitee. This Agreement shall continue for the benefit of Indemnitee and such heirs, personal representatives, executors and administrators after Indemnitee has ceased to have Corporate Status.

18. Change in Law. To the extent that a change in Delaware law (whether by statute or judicial decision) or the Certificate shall permit broader indemnification or advancement of expenses than is provided under the terms of the Bylaws and this Agreement, Indemnitee shall be entitled to such broader indemnification and advancements, and this Agreement shall be deemed to be amended to such extent.

19. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement, or any clause thereof, shall be determined by a court of competent jurisdiction to be illegal, invalid or unenforceable, in whole or in part, such provision or clause shall be limited or modified in its application to the minimum extent necessary to make such provision or clause valid, legal and enforceable, and the remaining provisions and clauses of this Agreement shall remain fully enforceable and binding on the parties.

20. Indemnitee as Plaintiff. Except as provided in Section 11(c) of this Agreement and in the next sentence, Indemnitee shall not be entitled to payment of Indemnifiable Amounts or advancement of Indemnifiable Expenses with respect to any Proceeding brought by Indemnitee against the Company, any Subsidiary, any Entity which it controls, any director or officer thereof or any third party, unless the Board of Directors has consented to the initiation of such Proceeding or the Company provides indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law. This Section shall not apply to counterclaims or affirmative defenses asserted by Indemnitee in an action brought against Indemnitee.

21. Modifications and Waivers; Counterparts. Except as provided in Section 18 above with respect to changes in Delaware law which broaden the right of Indemnitee to be indemnified by the Company or to receive advancements, no supplement, modification or amendment of this Agreement shall be binding unless executed in writing by each of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions of this Agreement (whether or not similar), nor shall such waiver constitute a continuing waiver. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement.

22. General Notices. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given (a) when delivered by hand, (b) when transmitted by facsimile and receipt is acknowledged during normal business hours, and if not, the next business day after transmission or (c) if mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed:

(i) If to Indemnitee, to:

[•]

(ii) If to the Company, to:

CervoMed Inc.
20 Park Plaza, Suite 424
Boston, Massachusetts 02116
Attn: General Counsel
E-mail: [_____]

or to such other address as may have been furnished in the same manner by any party to the others.

23. Governing Law; Consent to Jurisdiction; Service of Process. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware without regard to its rules of conflict of laws. Each of the Company and Indemnitee hereby irrevocably and unconditionally consents to submit to the exclusive jurisdiction of the Court of Chancery of the State of Delaware and the courts of the United States of America located in the State of Delaware (the "**Delaware Courts**") for any litigation arising out of or relating to this Agreement and the transactions contemplated hereby (and agrees not to commence any litigation relating thereto except in such courts), waives any objection to the laying of venue of any such litigation in the Delaware Courts and agrees not to plead or claim in any Delaware Court that such litigation brought therein has been brought in an inconvenient forum. Each of the parties hereto agrees, (a) to the extent such party is not otherwise subject to service of process in the State of Delaware, to appoint and maintain an agent in the State of Delaware as such party's agent for acceptance of legal process, and (b) that service of process may also be made on such party by prepaid certified mail with a proof of mailing receipt validated by the United States Postal Service constituting evidence of valid service. Service made pursuant to (a) or (b) above shall have the same legal force and effect as if served upon such party personally within the State of Delaware. For purposes of implementing the parties' agreement to appoint and maintain an agent for service of process in the State of Delaware, each such party does hereby appoint The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801, as such agent and each such party hereby agrees to complete all actions necessary for such appointment.

24. Joinders. Subsidiaries of the Company may from time to time join this Agreement by signing a joinder in substantially the form attached hereto as Exhibit A. The Company and all Subsidiaries that have joined this Agreement shall be jointly and severally liable for all obligations of the Company under this Agreement.

25. Assignment. Except as otherwise set forth herein, neither this Agreement nor any of the rights, interests or obligations hereunder may be assigned by any party hereto, without the prior written consent of all of the other parties hereto.

26. Entire Agreement. Without limitation to the Certificate and the Bylaws, this Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

[The remainder of this page is intentionally blank]

IN WITNESS WHEREOF, the parties hereto have executed this Indemnification Agreement as of the day and year first above written.

CERVOMED INC.

By: _____
Name: []
Title: []

INDEMNITEE

Name: []

[Signature Page to Fund Indemnification Agreement]

EXHIBIT A

JOINDERS

The undersigned hereby join in the obligations of CervoMed Inc. under this Indemnification Agreement as provided in Section 24 above on this ____ day of ____, 20[.].

[_____]

By: /s/ _____
Name:
Title:

[_____]

By: /s/ _____
Name:
Title:

[Signature Page to Joinder to Indemnification Agreement]

SIGNIFICANT SUBSIDIARIES OF THE REGISTRANT

Name of Subsidiary	State or Other Jurisdiction of Incorporation or Organization	Direct or Indirect Ownership Interest by Company
EIP Pharma, Inc.	DE	100%
Diffusion Pharmaceuticals LLC	VA	100%

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements (Nos. 333-206408, 333-206409, 333-218060, 333-2267182, 333-233381, 333-238233, 333-258760, 333-266827 and 333-274785) on Form S-8, Registration Statements (Nos. 333-218062, 333-222879, 333-231541, and 333-249057) on Form S-3, and Registration Statements (Nos. 333-222203, 333-233686, 333-234234, 333-235670, and 333-238818) on Form S-1 of CervoMed Inc. (formerly known as Diffusion Pharmaceuticals Inc.) of our report dated March X, 2024, relating to the consolidated financial statements of CervoMed Inc. and subsidiaries, appearing in this Annual Report on Form 10-K of CervoMed Inc. for the year ended December 31, 2023.

/s/ RSM US LLP

Boston, Massachusetts

March 29, 2024

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES OXLEY ACT OF 2002

I, John J. Alam, M.D., certify that:

1. I have reviewed this annual report on Form 10-K of CervoMed Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2024

/s/ John J. Alam, M.D

John J. Alam, M.D
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION OF ACTING PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE
SECURITIES EXCHANGE ACT OF 1934, AS AMENDED, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES OXLEY ACT
OF 2002**

I, William Elder, certify that:

1. I have reviewed this annual report on Form 10-K of CervoMed Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2024

/s/ William Elder

William Elder
General Counsel and Corporate
Secretary
(Acting Principal Financial Officer)

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

In connection with the Annual Report on Form 10-K of CervoMed Inc. (the "Company") for the period ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (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: March 29, 2024

/s/ John J. Alam, M.D.

John J. Alam, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

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

In connection with the Annual Report on Form 10-K of CervoMed Inc. (the "Company") for the period ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (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: March 29, 2024

/s/ William Elder

William Elder
General Counsel and Corporate
Secretary
(Acting Principal Financial Officer)

CERVOMED INC.

CLAWBACK POLICY

I. Introduction

The Board of Directors (the “**Board**”) of CervoMed Inc. (the “**Company**”) believes that it is in the best interests of the Company and its shareholders to create and maintain a culture that emphasizes integrity and accountability and that reinforces the Company’s pay-for-performance compensation philosophy. The Board has therefore adopted this policy which provides for the recoupment of certain executive compensation in the event of an accounting restatement resulting from material noncompliance with financial reporting requirements under the federal securities laws (the “**Policy**”). This Policy is designed to comply with Section 10D of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”) and final rules and amendments adopted by the Securities and Exchange Commission (the “**SEC**”) to implement the aforementioned legislation.

II. Administration

This Policy shall be administered by the Board or, if so designated by the Board, the Compensation Committee of the Board, in which case references herein to the Board shall be deemed references to the Compensation Committee. Any determinations made by the Board shall be final and binding on all affected individuals.

III. Covered Executives

This Policy applies to the Company’s current and former executive officers, as determined by the Board in accordance with the requirements of Section 10D of the Exchange Act and any applicable rules or standards adopted by the SEC and any national securities exchange on which the Company’s securities are listed, and such other employees who may from time to time be deemed subject to the Policy by the Board (“**Covered Executives**”).

IV. Incentive-Based Compensation

For purposes of this Policy, incentive-based compensation (“**Incentive-Based Compensation**”) includes any compensation that is granted, earned, or vested based wholly or in part upon the attainment of any financial reporting measures that are determined and presented in accordance with the accounting principles (“**GAAP Measures**”) used in preparing the Company’s financial statements and any measures derived wholly or in part from such measures, as well as non-GAAP Measures, stock price, and total shareholder return (collectively, “**Financial Reporting Measures**”); however, it does not include: (i) base salaries; (ii) discretionary cash bonuses; (iii) awards (either cash or equity) that are solely based upon subjective, strategic or operational standards or standards unrelated to Financial Reporting Measures, and (iv) equity awards that vest solely on completion of a specified employment period or without any performance condition. Incentive-Based Compensation is considered received in the fiscal period during which the applicable reporting measure is attained, even if the payment or grant of such award occurs after the end of that period. If an award is subject to both time-based and performance-based vesting conditions, the award is considered received upon satisfaction of the performance-based conditions, even if such an award continues to be subject to the time-based vesting conditions.

For the purposes of this Policy, Incentive-Based Compensation may include, among other things, any of the following:

- Annual bonuses and other short- and long-term cash incentives.
- Stock options.
- Stock appreciation rights.
- Restricted stock or restricted stock units.
- Performance shares or performance units.

For purposes of this Policy, Financial Reporting Measures may include, among other things, any of the following:

- Company stock price.
 - Total shareholder return.
 - Revenues.
 - Net income.
-

- Earnings before interest, taxes, depreciation, and amortization (EBITDA).
- Funds from operations.
- Liquidity measures such as working capital or operating cash flow.
- Return measures such as return on invested capital or return on assets.
- Earnings measures such as earnings per share.

V. Recoupment; Accounting Restatement

In the event the Company is required to prepare an accounting restatement of its financial statements due to the Company’s material noncompliance with any financial reporting requirement under U.S. securities laws, including any required accounting restatement to correct an error in previously issued financial statements that (i) is material to the previously issued financial statements or (ii) is not material to previously issued financial statements, but that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period, the Board will require reimbursement or forfeiture of any excess Incentive-Based Compensation received by any Covered Executive during the three completed fiscal years immediately preceding the date on which the Company is required to prepare the accounting restatement (the “**Look-Back Period**”). For the purposes of this Policy, the date on which the Company is required to prepare an accounting restatement is the earlier of (i) the date the Board concludes or reasonably should have concluded that the Company is required to prepare a restatement to correct a material error, and (ii) the date a court, regulator, or other legally authorized body directs the Company to restate its previously issued financial statements to correct a material error. The Company’s obligation to recover erroneously awarded compensation is not dependent on if or when the restated financial statements are filed.

Recovery of the Incentive-Based Compensation is only required when the excess award is received by a Covered Executive (i) after the beginning of their service as a Covered Executive, (ii) who served as an executive officer at any time during the performance period for that Incentive-Based Compensation, (iii) while the Company has a class of securities listed on a national securities exchange or a national securities association, and (iv) during the Look-Back Period immediately preceding the date on which the Company is required to prepare an accounting restatement.

VI. Excess Incentive Compensation: Amount Subject to Recovery

The amount of Incentive-Based Compensation subject to recovery is the amount the Covered Executive received in excess of the amount of Incentive-Based Compensation that would have been paid to the Covered Executive had it been based on the restated financial statements, as determined by the Board. The amount subject to recovery will be calculated on a pre-tax basis.

For Incentive-Based Compensation received as cash awards, the erroneously awarded compensation is the difference between the amount of the cash award that was received (whether payable in a lump sum or over time) and the amount that should have been received applying the restated Financial Reporting Measure. For cash awards paid from bonus pools, the erroneously awarded Incentive-Based Compensation is the pro rata portion of any deficiency that results from the aggregate bonus pool that is reduced based on applying the restated Financial Reporting Measure.

For Incentive-Based Compensation received as equity awards that are still held at the time of recovery, the amount subject to recovery is the number of shares or other equity awards received or vested in excess of the number that should have been received or vested applying the restated Financial Reporting Measure. If the equity award has been exercised, but the underlying shares have not been sold, the erroneously awarded compensation is the number of shares underlying the award.

In instances where the Company is not able to determine the amount of erroneously awarded Incentive-Based Compensation directly from the information in the accounting restatement, the amount will be based on the Company’s reasonable estimate of the effect of the accounting restatement on the applicable measure. In such instances, the Company will maintain documentation of the determination of that reasonable estimate.

VII. Method of Recoupment

The Board will determine, in its sole discretion, subject to applicable law, the method for recouping Incentive-Based Compensation hereunder, which may include, without limitation:

- requiring reimbursement of cash Incentive-Based Compensation previously paid;

- seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based awards;
- offsetting the recouped amount from any compensation otherwise owed by the Company to the Covered Executive;
- cancelling outstanding vested or unvested equity awards; and/or
- taking any other remedial and recovery action permitted by law, as determined by the Board.

VIII. No Indemnification; Successors

The Company shall not indemnify any Covered Executives against the loss of any incorrectly awarded Incentive-Based Compensation. This Policy shall be binding and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives.

IX. Exception to Enforcement

The Board shall recover any excess Incentive-Based Compensation in accordance with this Policy unless such recovery would be impracticable, as determined by the Board in accordance with Rule 10D-1 of the Exchange Act and any applicable rules or standards adopted by the SEC and the listing standards of any national securities exchange on which the Company's securities are listed.

X. Interpretation

The Board is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate, or advisable for the administration of this Policy. It is intended that this Policy be interpreted in a manner that is consistent with the requirements of Section 10D of the Exchange Act and any applicable rules or standards adopted by the SEC and any national securities exchange on which the Company's securities are listed.

XI. Effective Date

This Policy shall be effective as of the date it is adopted by the Board (the "**Effective Date**") and shall apply to Incentive-Based Compensation that is received by a Covered Executive on or after that date, as determined by the Board in accordance with applicable rules or standards adopted by the SEC and the listing standards of any national securities exchange on which the Company's securities are listed.

XII. Amendment; Termination

The Board may amend this Policy from time to time in its discretion and shall amend this Policy as it deems necessary to comply with any rules or standards adopted by the SEC and the listing standards of any national securities exchange on which the Company's securities are listed. The Board may terminate this Policy at any time.

XIII. Other Recoupment Rights

Any right of recoupment under this Policy is in addition to, and not in lieu of, any other remedies or rights of recoupment that may be available to the Company pursuant to the terms of any similar policy in any employment agreement, equity award agreement, or similar agreement and any other legal remedies available to the Company.

Effective: August 16, 2023